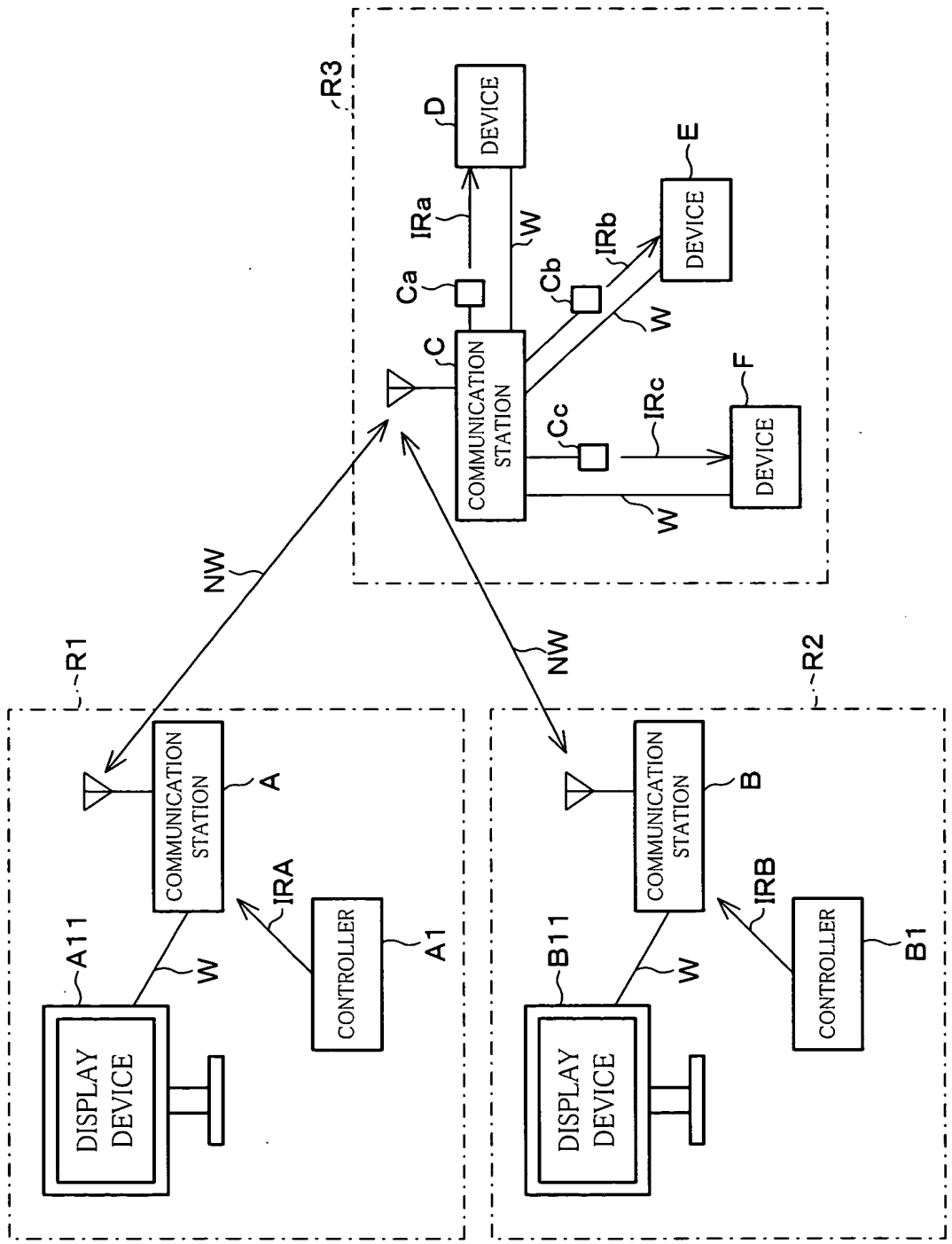

R3
D
DEVICE
IRa
W
E
DEVICE
IRb
Ca
Cb
W
C
COMMUNICATION STATION
F
Cc
IRc
DEVICE
W
NW
NW
R1
R2
COMMUNICATION STATION
A
COMMUNICATION STATION
B
IRA
IRB
A11
W
CONTROLLER
A1
B11
W
CONTROLLER
B1
DISPLAY DEVICE
DISPLAY DEVICE

FIG. 1

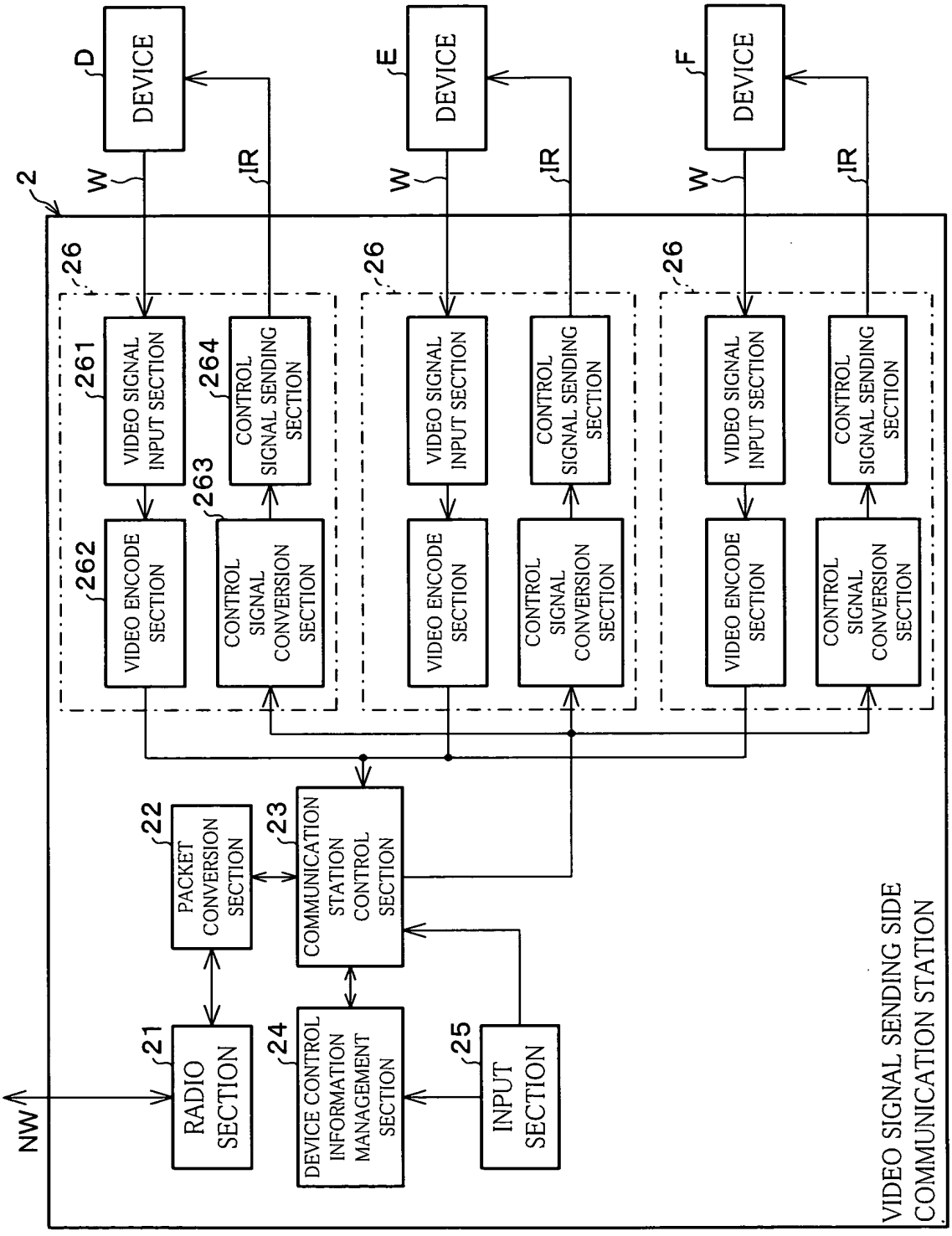

D
DEVICE
E
DEVICE
F
DEVICE
W
IR
2
26
261
VIDEO SIGNAL INPUT SECTION
264
CONTROL SIGNAL SENDING SECTION
263
262
VIDEO ENCODE SECTION
CONTROL SIGNAL CONVERSION SECTION
22
PACKET CONVERSION SECTION
23
COMMUNICATION STATION CONTROL SECTION
21
RADIO SECTION
24
DEVICE CONTROL INFORMATION MANAGEMENT SECTION
25
INPUT SECTION
NW
VIDEO SIGNAL SENDING SIDE COMMUNICATION STATION

FIG. 2

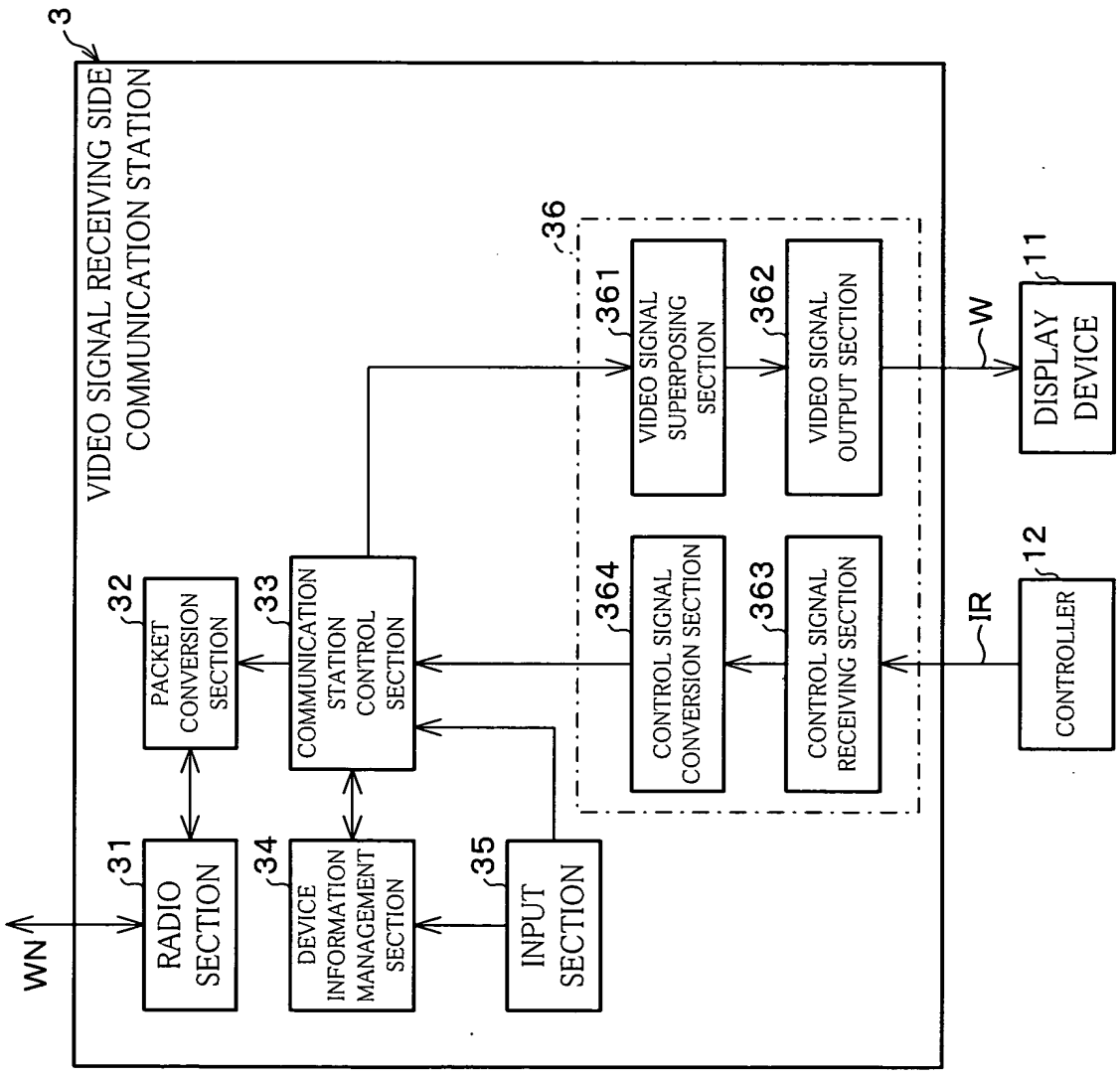

3
VIDEO SIGNAL RECEIVING SIDE COMMUNICATION STATION
WN
31
RADIO SECTION
32
PACKET CONVERSION SECTION
33
COMMUNICATION STATION CONTROL SECTION
34
DEVICE INFORMATION MANAGEMENT SECTION
35
INPUT SECTION
36
361
VIDEO SIGNAL SUPERPOSING SECTION
362
VIDEO SIGNAL OUTPUT SECTION
363
CONTROL SIGNAL RECEIVING SECTION
364
CONTROL SIGNAL CONVERSION SECTION
W
11
DISPLAY DEVICE
IR
12
CONTROLLER

FIG. 3

FIG. 4

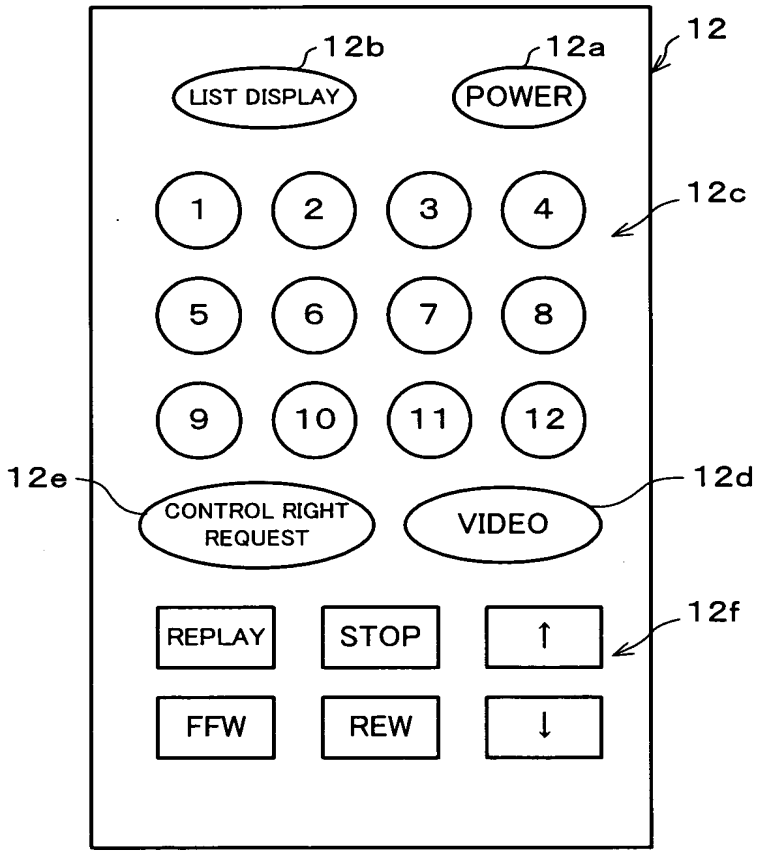

12
12b
12a
LIST DISPLAY
POWER
1
2
3
4
12c
5
6
7
8
9
10
11
12
12e
12d
CONTROL RIGHT REQUEST
VIDEO
12f
REPLAY
STOP
↑
FFW
REW
↓

FIG. 5

DEVICE ID	DEVICE NAME	CONTROL INFORMATION
123	VTR1	
456	DVD	
789	VTR2	555
⋮	⋮	⋮

FIG. 6

SELECTION	DEVICE ID	DEVICE NAME	COMMUNICATION ADDRESS
	123	VTR1	33333
	456	DVD	33333
	789	VTR1	33333
	222	TV1	22222
	⋮	⋮	⋮

FIG. 7

RECEIVING END ADDRESS	33333	
SENDING END ADDRESS	11111	
INFORMATION SECTION	COMMAND	CONTROL RIGHT REQUEST
	TARGET DEVICE ID	123
	SENDING DEVICE ID	444
	⋮	⋮

FIG. 8

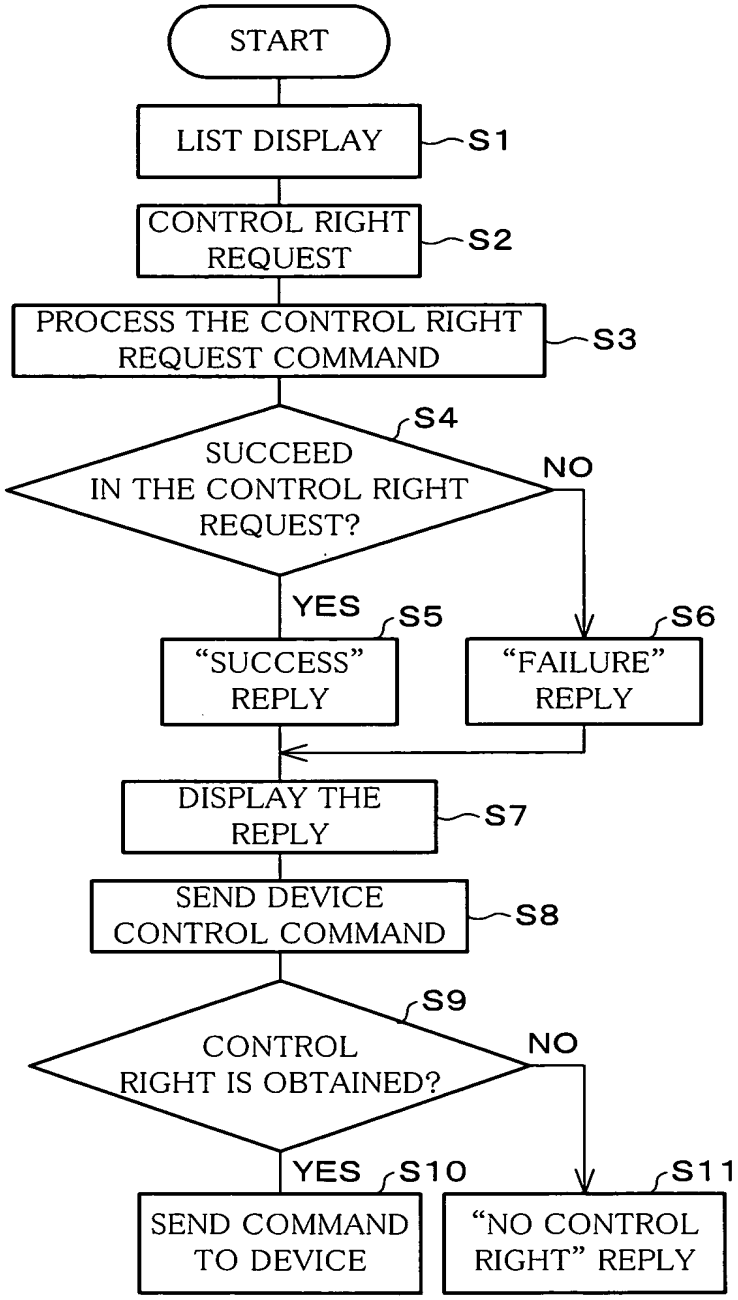

START
LIST DISPLAY
S1
CONTROL RIGHT REQUEST
S2
PROCESS THE CONTROL RIGHT REQUEST COMMAND
S3
S4
SUCCEED IN THE CONTROL RIGHT REQUEST?
NO
YES
S5
"SUCCESS" REPLY
S6
"FAILURE" REPLY
DISPLAY THE REPLY
S7
SEND DEVICE CONTROL COMMAND
S8
S9
CONTROL RIGHT IS OBTAINED?
NO
YES
S10
SEND COMMAND TO DEVICE
S11
"NO CONTROL RIGHT" REPLY

FIG. 9

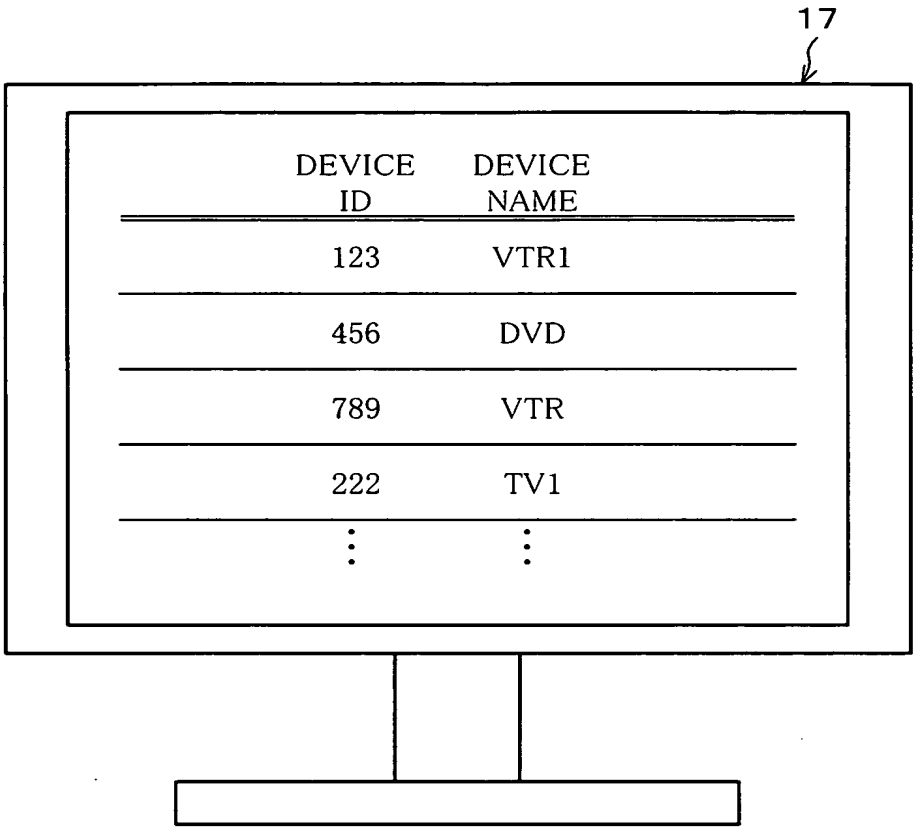


FIG. 10

COMMAND	TARGET DEVICE ID	CONTROLLER ID
CONTROL RIGHT REQUEST	123	444

FIG. 11

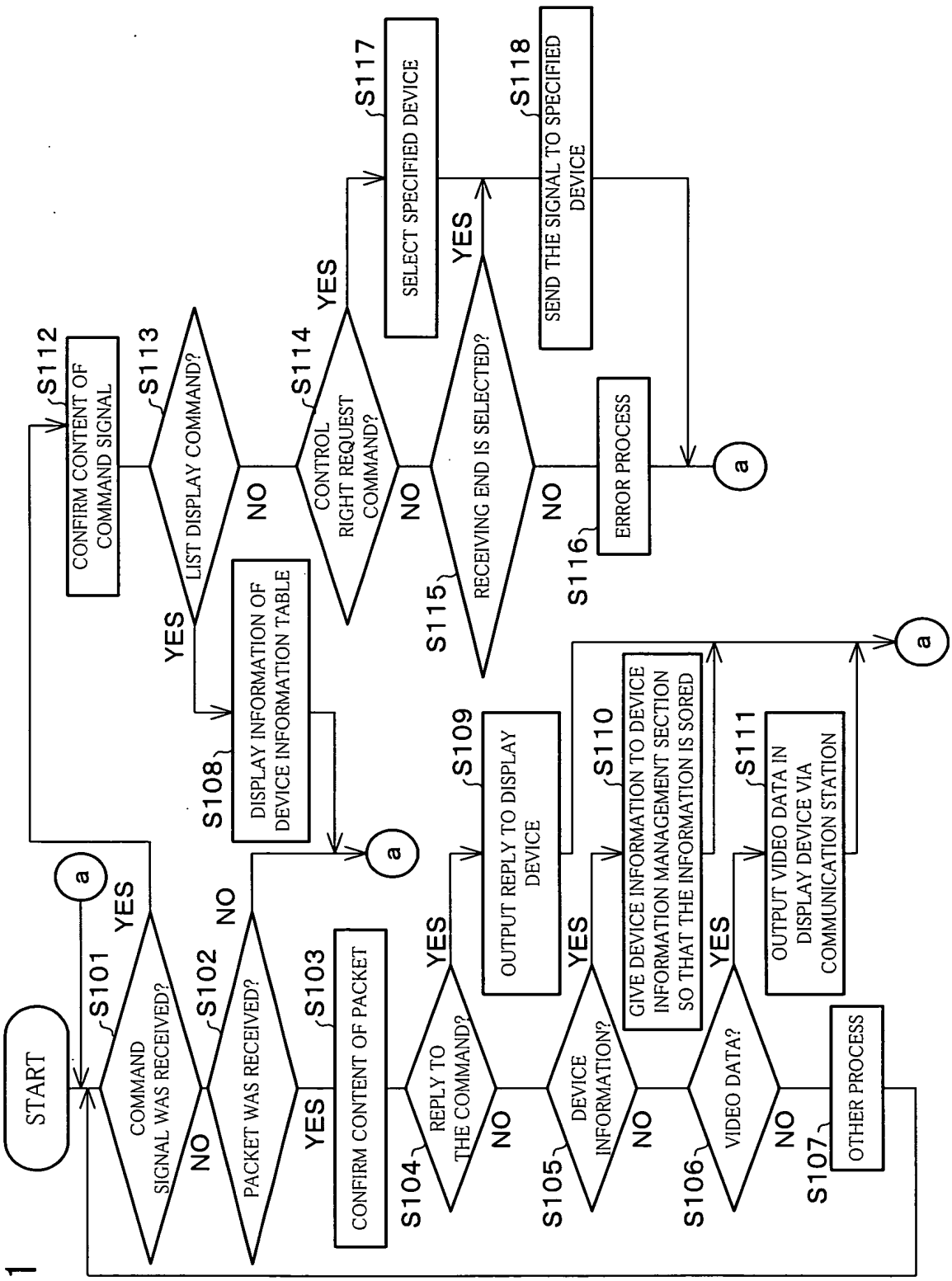

START
S101
COMMAND SIGNAL WAS RECEIVED?
YES
NO
S102
PACKET WAS RECEIVED?
YES
NO
S103
CONFIRM CONTENT OF PACKET
S104
REPLY TO THE COMMAND?
YES
NO
S105
DEVICE INFORMATION?
YES
NO
S106
VIDEO DATA?
YES
NO
S107
OTHER PROCESS
S108
DISPLAY INFORMATION OF DEVICE INFORMATION TABLE
S109
OUTPUT REPLY TO DISPLAY DEVICE
S110
GIVE DEVICE INFORMATION TO DEVICE INFORMATION MANAGEMENT SECTION SO THAT THE INFORMATION IS SORED
S111
OUTPUT VIDEO DATA IN DISPLAY DEVICE VIA COMMUNICATION STATION
a
S112
CONFIRM CONTENT OF COMMAND SIGNAL
S113
LIST DISPLAY COMMAND?
YES
NO
S114
CONTROL RIGHT REQUEST COMMAND?
YES
NO
S115
RECEIVING END IS SELECTED?
YES
NO
S116
ERROR PROCESS
S117
SELECT SPECIFIED DEVICE
S118
SEND THE SIGNAL TO SPECIFIED DEVICE
a

FIG. 12

SELECTION	DEVICE ID	DEVICE NAME	COMMUNICATION ADDRESS
○	123	VTR1	33333
	456	DVD	33333
	789	VTR2	33333
	222	TV1	22222
	⋮	⋮	⋮

FIG. 13

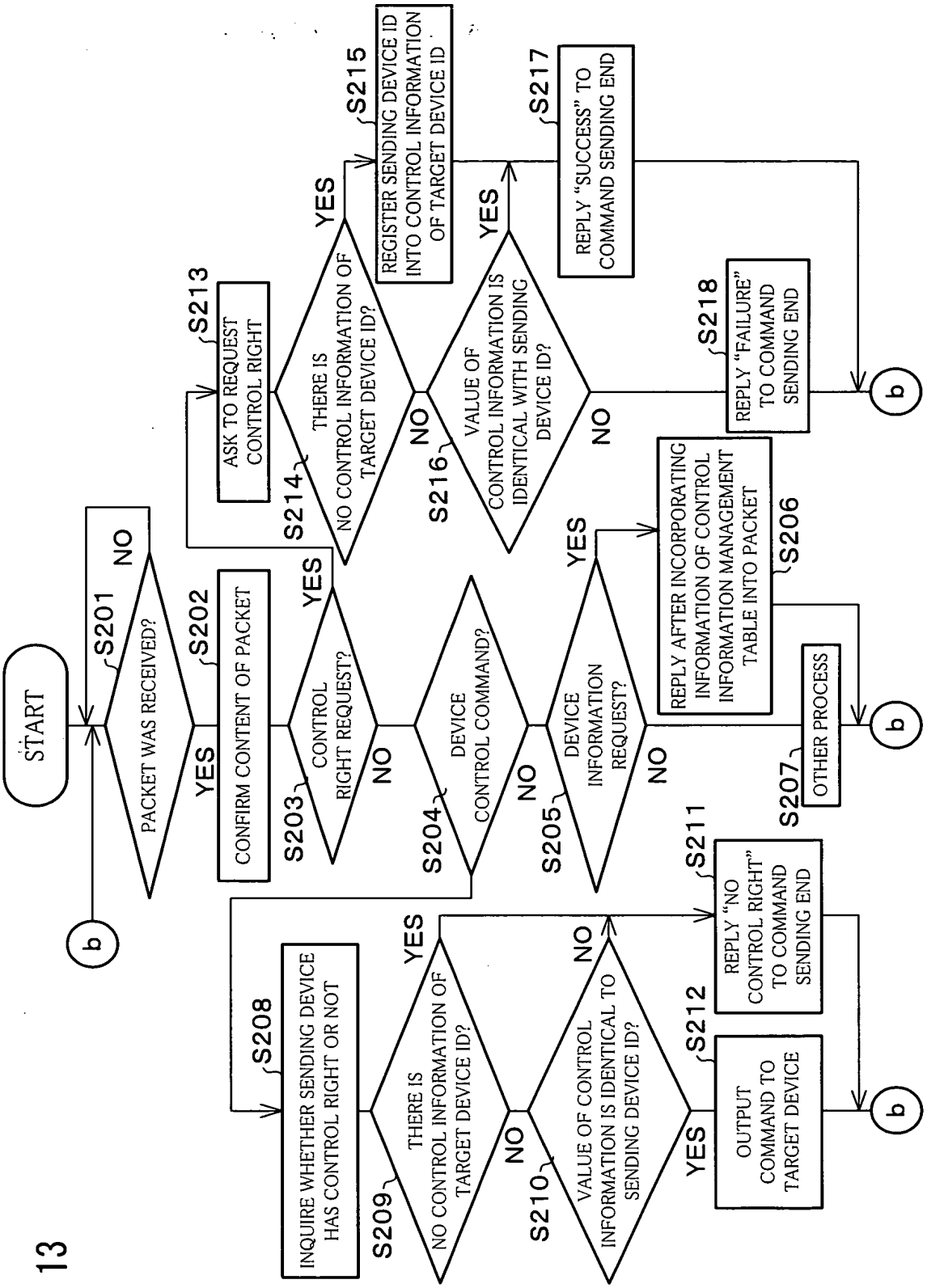

START
S201
PACKET WAS RECEIVED?
NO
YES
S202
CONFIRM CONTENT OF PACKET
S203
CONTROL RIGHT REQUEST?
YES
NO
S204
DEVICE CONTROL COMMAND?
YES
NO
S205
DEVICE INFORMATION REQUEST?
YES
NO
S206
REPLY AFTER INCORPORATING INFORMATION OF CONTROL INFORMATION MANAGEMENT TABLE INTO PACKET
S207
OTHER PROCESS
S208
INQUIRE WHETHER SENDING DEVICE HAS CONTROL RIGHT OR NOT
S209
THERE IS NO CONTROL INFORMATION OF TARGET DEVICE ID?
YES
NO
S210
VALUE OF CONTROL INFORMATION IS IDENTICAL TO SENDING DEVICE ID?
YES
NO
S211
REPLY "NO CONTROL RIGHT" TO COMMAND SENDING END
S212
OUTPUT COMMAND TO TARGET DEVICE
S213
ASK TO REQUEST CONTROL RIGHT
S214
THERE IS NO CONTROL INFORMATION OF TARGET DEVICE ID?
YES
NO
S215
REGISTER SENDING DEVICE ID INTO CONTROL INFORMATION OF TARGET DEVICE ID
S216
VALUE OF CONTROL INFORMATION IS IDENTICAL WITH SENDING DEVICE ID?
YES
NO
S217
REPLY "SUCCESS" TO COMMAND SENDING END
S218
REPLY "FAILURE" TO COMMAND SENDING END
b
b
b
b
b

FIG. 14

DEVICE ID	DEVICE NAME	CONTROL INFORMATION
123	VTR1	444
456	DVD	
789	VTR2	555
⋮	⋮	⋮

FIG. 15

RECEIVING END ADDRESS	11111	
SENDING END ADDRESS	33333	
INFORMATION SECTION	COMMAND	CONTROL RIGHT REQUEST
	TARGET DEVICE ID	123
	SENDING DEVICE ID	444
	⋮	⋮

FIG. 16

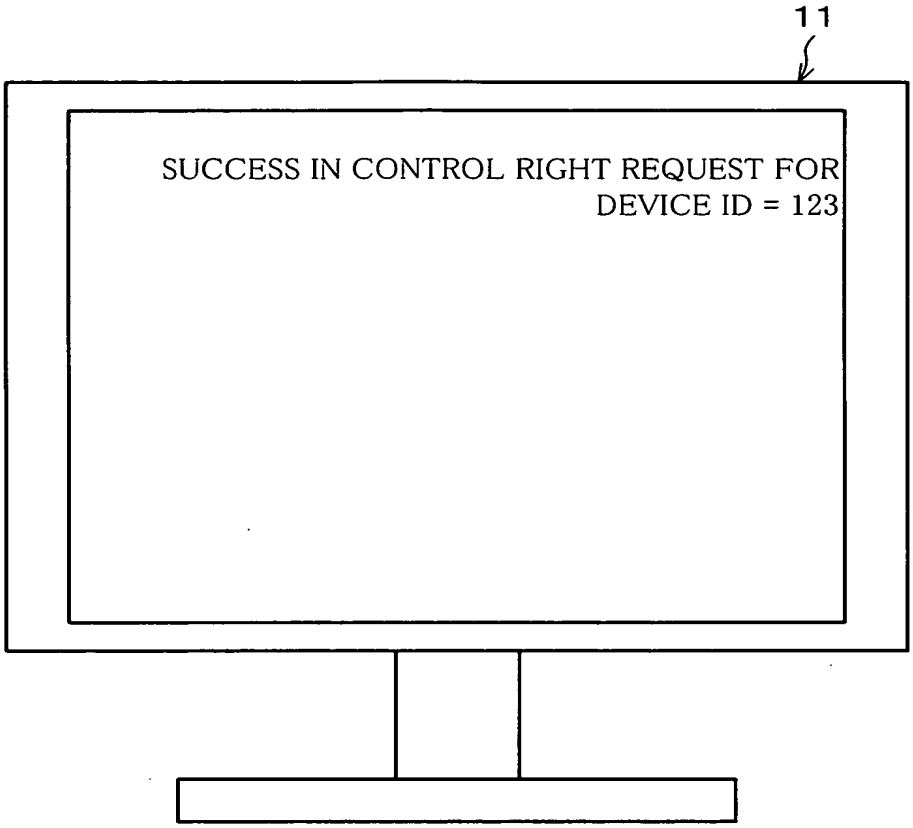


FIG. 17

COMMAND	CONTROLLER ID
REPRODUCTION	444

FIG. 18

RECEIVING END ADDRESS	33333	
SENDING END ADDRESS	11111	
INFORMATION SECTION	COMMAND	REPRODUCTION
	TARGET DEVICE ID	123
	SENDING DEVICE ID	444
	⋮	⋮

FIG. 19

RECEIVING END ADDRESS	11111	
SENDING END ADDRESS	33333	
INFORMATION SECTION	COMMAND	NO CONTROL RIGHT
	TARGET DEVICE ID	123
	SENDING DEVICE ID	444
	⋮	⋮

FIG. 20

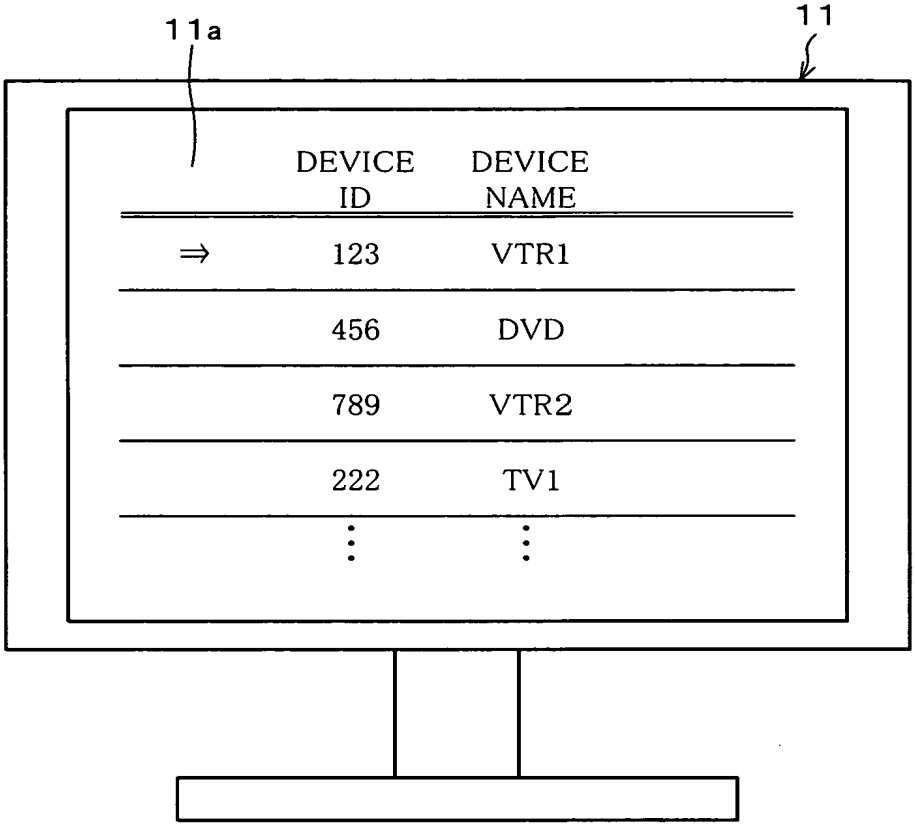


FIG. 21

COMMAND	TARGET DEVICE ID	CONTROLLER ID
REPRODUCTION	123	444

FIG. 22

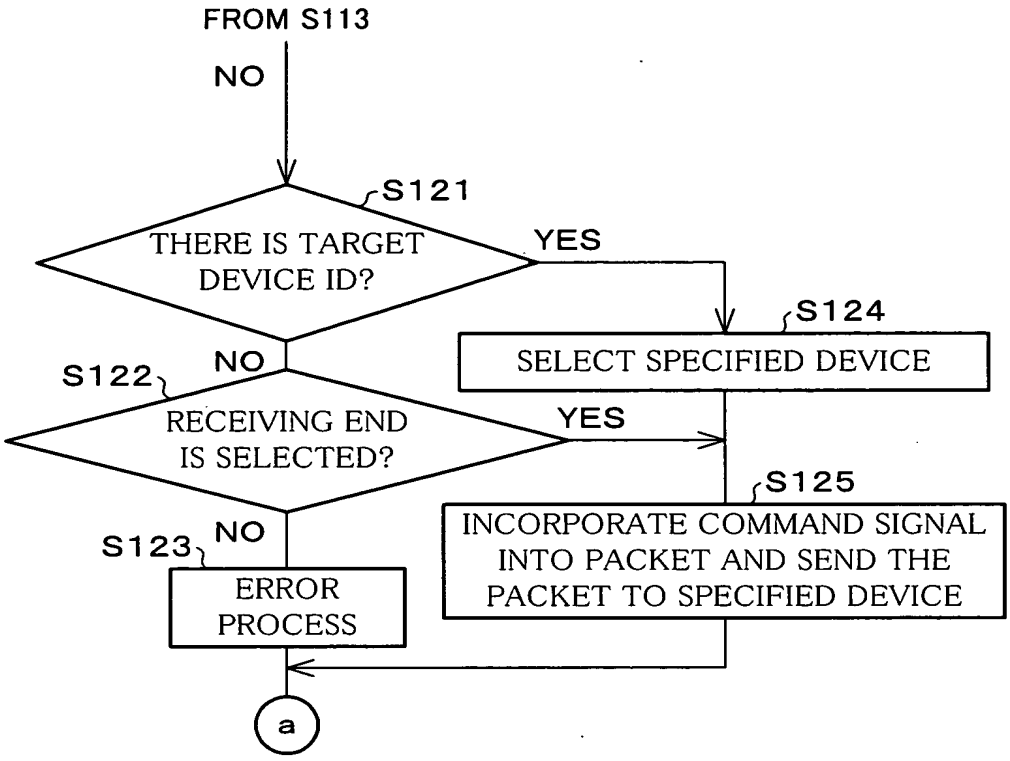
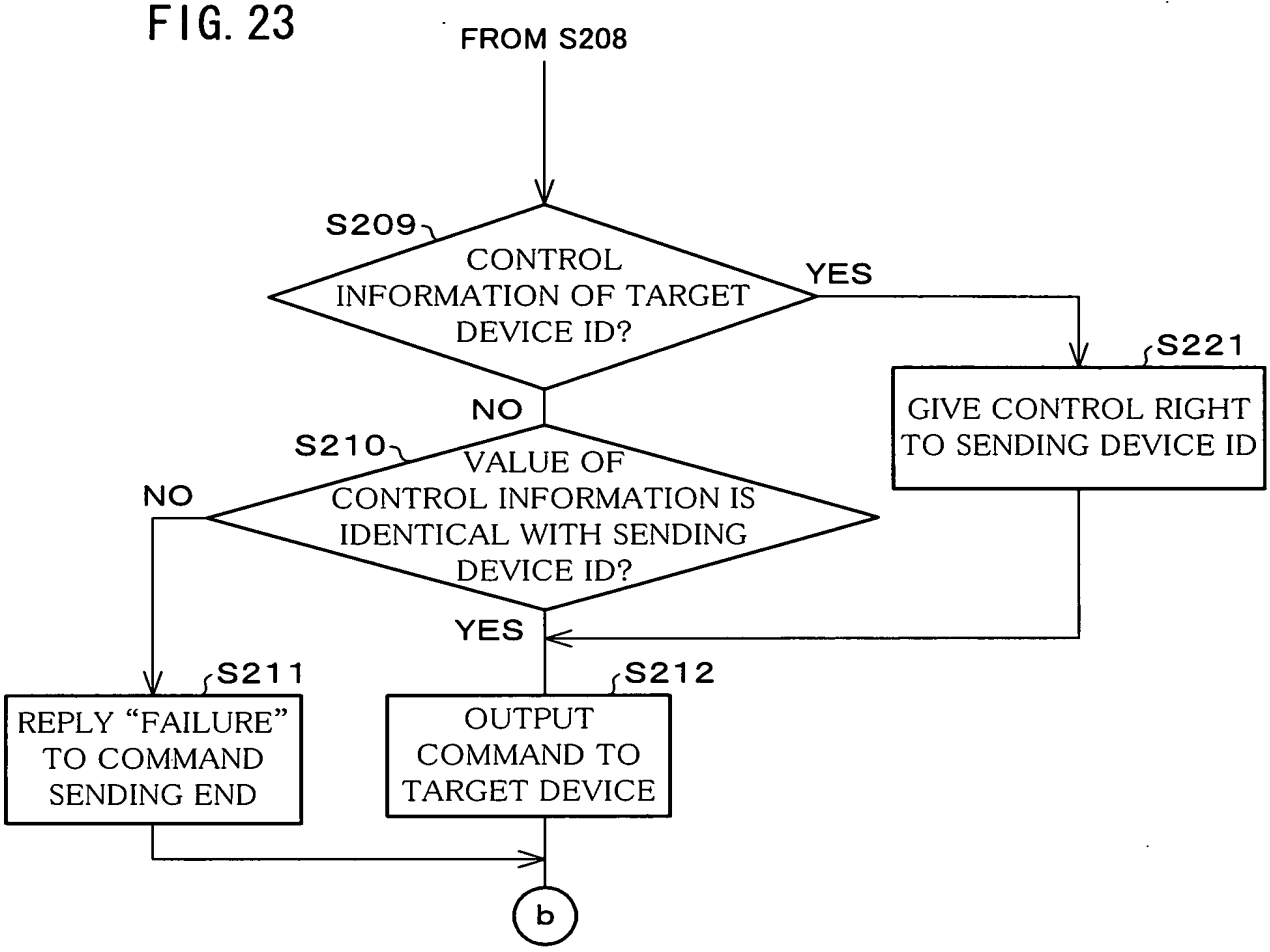

FROM S113
NO
S121
THERE IS TARGET DEVICE ID?
YES
S124
SELECT SPECIFIED DEVICE
NO
S122
RECEIVING END IS SELECTED?
YES
S125
INCORPORATE COMMAND SIGNAL INTO PACKET AND SEND THE PACKET TO SPECIFIED DEVICE
NO
S123
ERROR PROCESS
a

FIG. 23


FROM S208
S209
CONTROL INFORMATION OF TARGET DEVICE ID?
YES
S221
GIVE CONTROL RIGHT TO SENDING DEVICE ID
NO
S210
VALUE OF CONTROL INFORMATION IS IDENTICAL WITH SENDING DEVICE ID?
NO
YES
S211
REPLY "FAILURE" TO COMMAND SENDING END
S212
OUTPUT COMMAND TO TARGET DEVICE
b

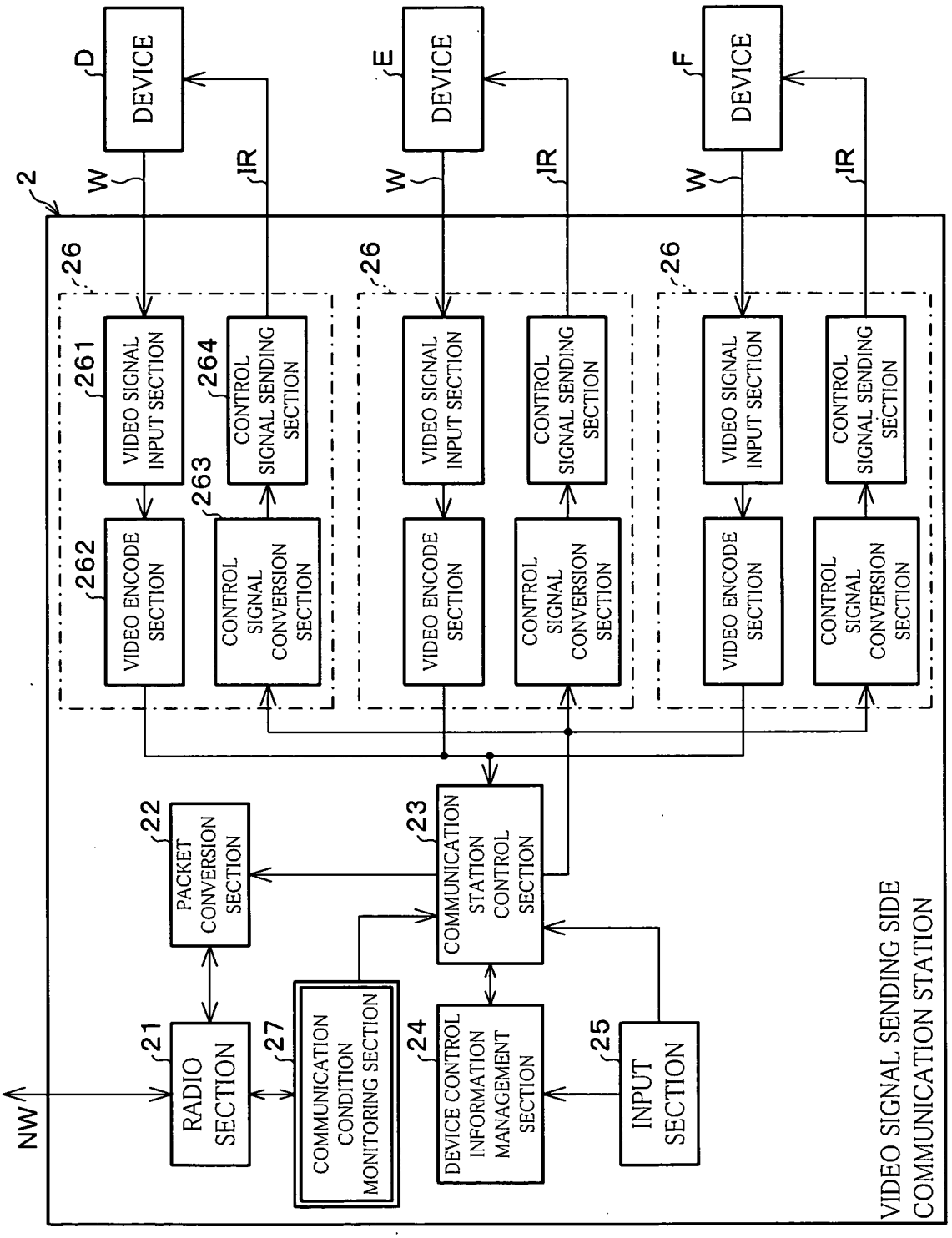

D
DEVICE
E
DEVICE
F
DEVICE
W
IR
2
26
261
VIDEO SIGNAL INPUT SECTION
264
CONTROL SIGNAL SENDING SECTION
263
262
VIDEO ENCODE SECTION
CONTROL SIGNAL CONVERSION SECTION
22
PACKET CONVERSION SECTION
23
COMMUNICATION STATION CONTROL SECTION
21
RADIO SECTION
27
COMMUNICATION CONDITION MONITORING SECTION
24
DEVICE CONTROL INFORMATION MANAGEMENT SECTION
25
INPUT SECTION
NW
VIDEO SIGNAL SENDING SIDE COMMUNICATION STATION

FIG. 24

FIG. 25

DEVICE ID	DEVICE NAME	CONTROL INFORMATION	STREAM RECEIVING END
123	VTR1	444	11111
456	DVD		
789	VTR2	555	22222
⋮	⋮	⋮	⋮

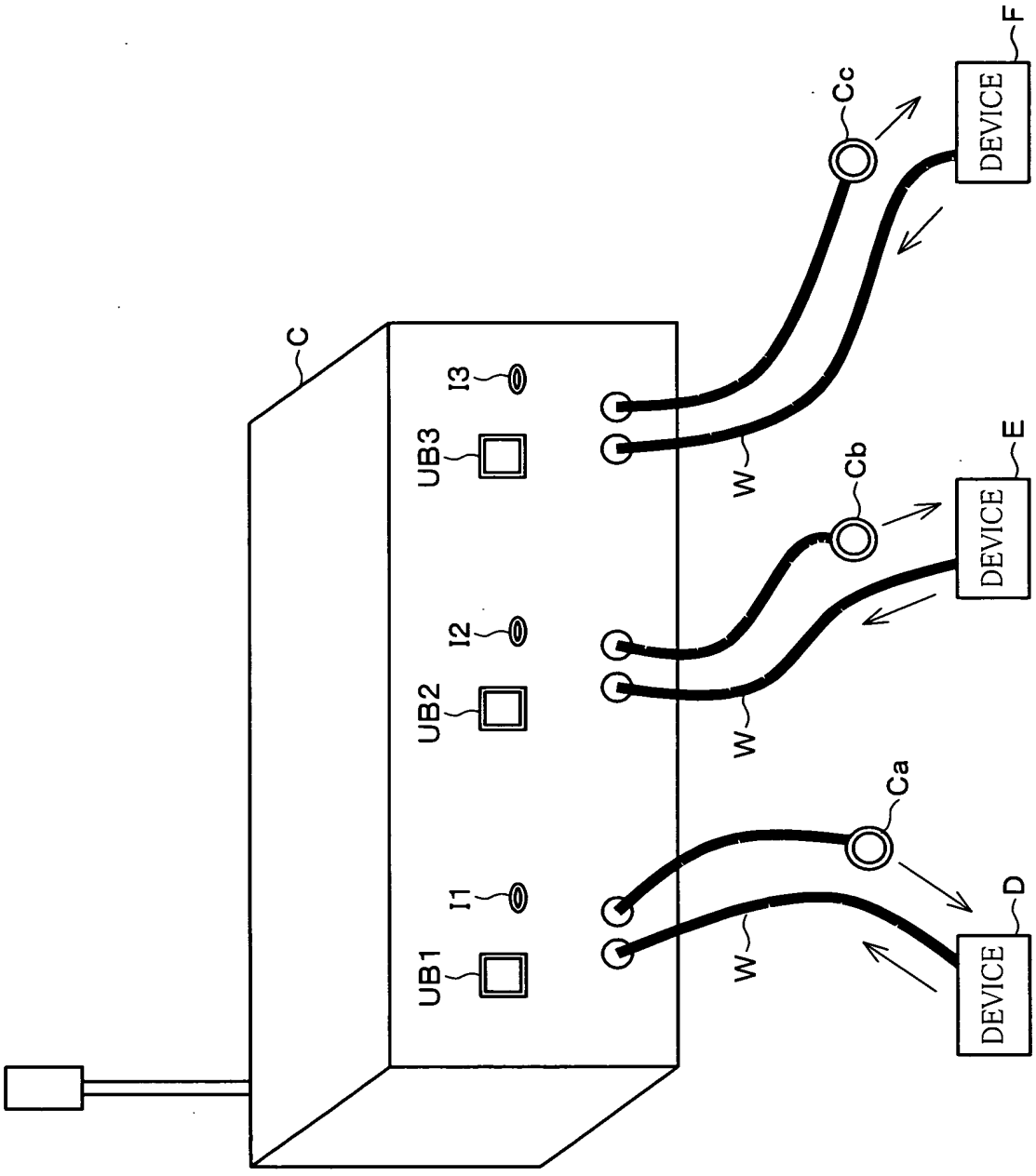


FIG. 26

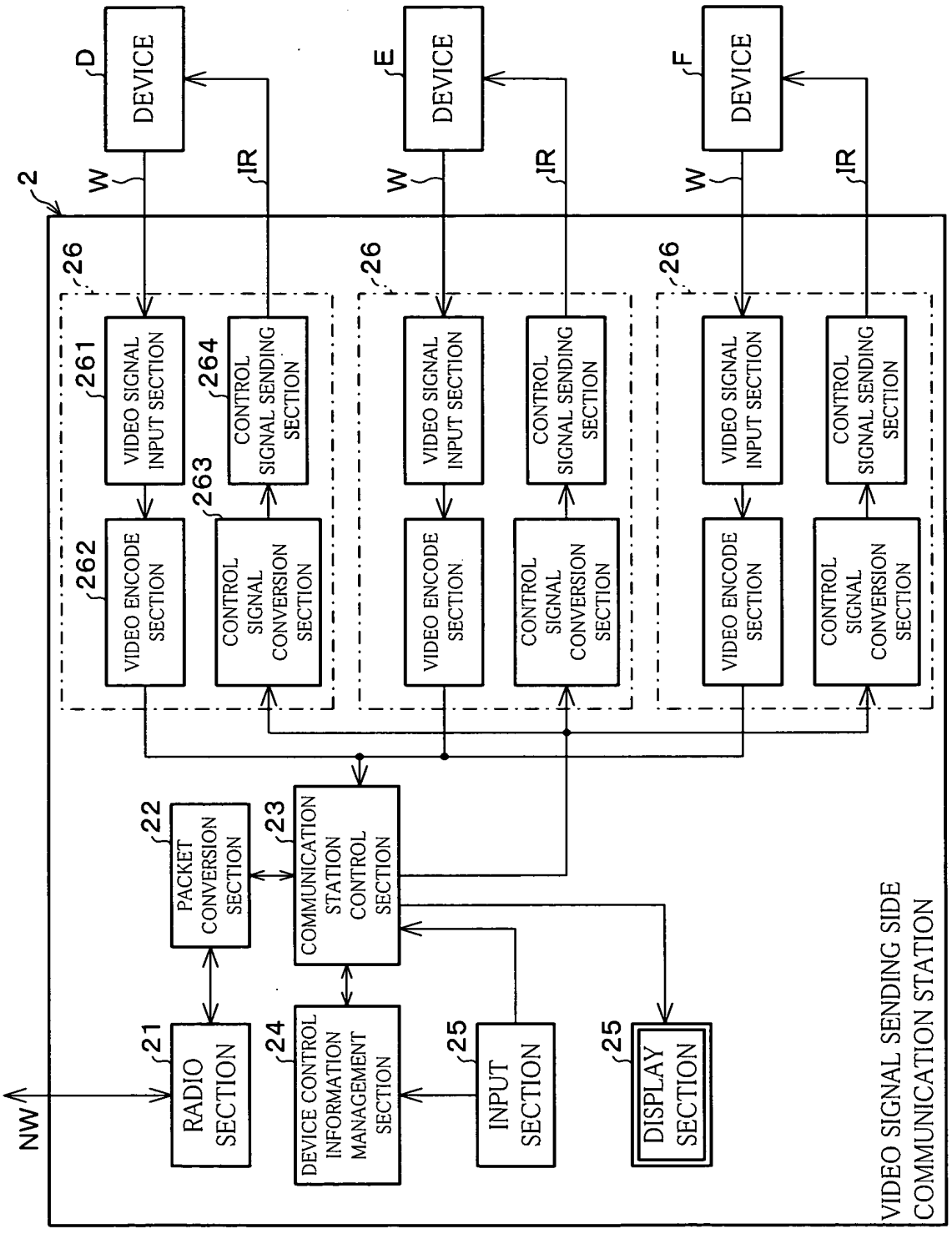

D
DEVICE
E
DEVICE
F
DEVICE
W
IR
2
26
261
VIDEO SIGNAL INPUT SECTION
264
CONTROL SIGNAL SENDING SECTION
263
262
VIDEO ENCODE SECTION
CONTROL SIGNAL CONVERSION SECTION
22
PACKET CONVERSION SECTION
23
COMMUNICATION STATION CONTROL SECTION
21
RADIO SECTION
24
DEVICE CONTROL INFORMATION MANAGEMENT SECTION
25
INPUT SECTION
25
DISPLAY SECTION
NW
VIDEO SIGNAL SENDING SIDE COMMUNICATION STATION

FIG. 27

FIG. 28

DEVICE ID	DEVICE NAME	CONTROL INFORMATION
123	VTR1	***
456	DVD	
789	VTR2	555
⋮	⋮	⋮

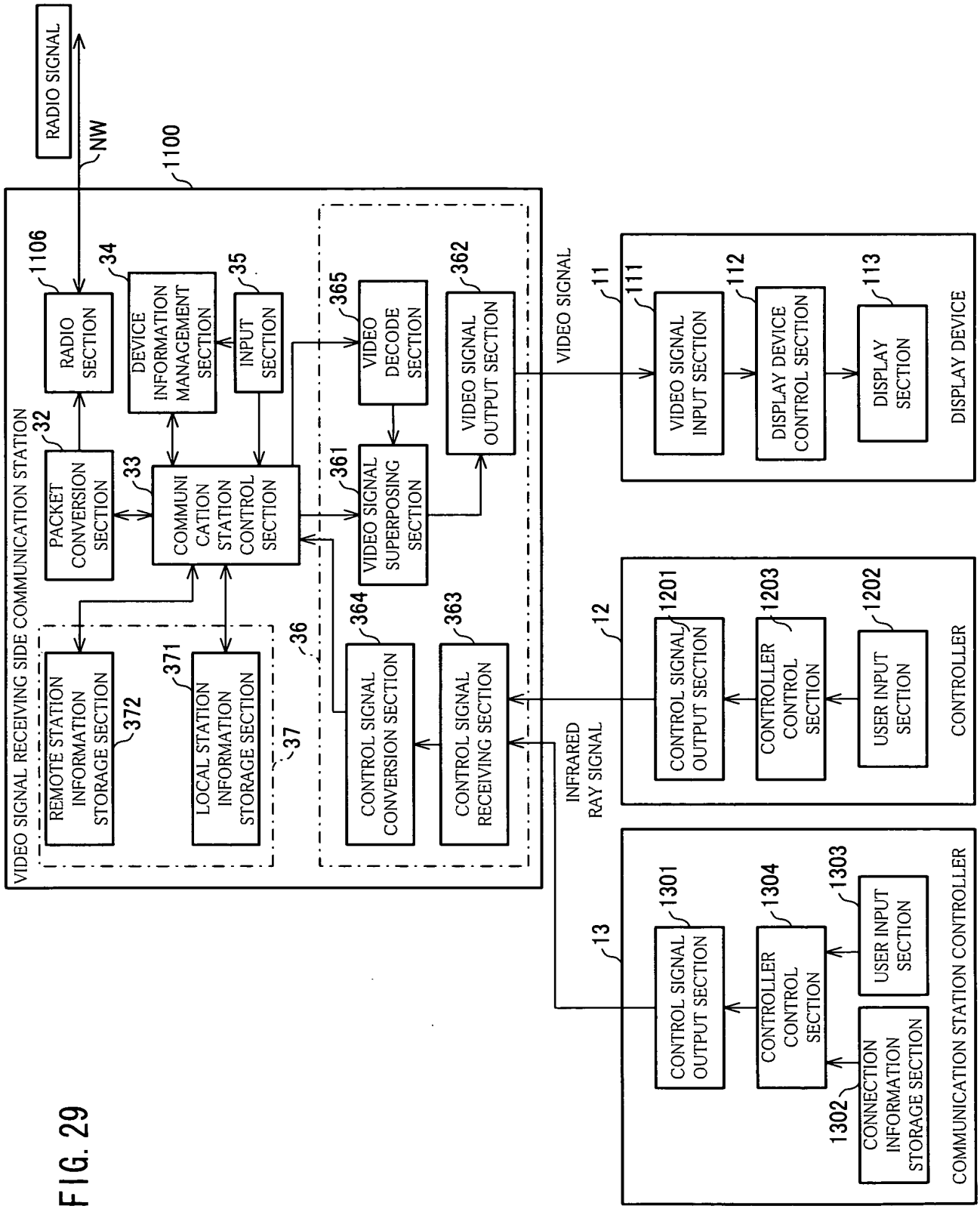

RADIO SIGNAL
NW
1100
VIDEO SIGNAL RECEIVING SIDE COMMUNICATION STATION
1106
RADIO SECTION
34
DEVICE INFORMATION MANAGEMENT SECTION
35
INPUT SECTION
365
VIDEO DECODE SECTION
362
VIDEO SIGNAL OUTPUT SECTION
32
PACKET CONVERSION SECTION
33
COMMUNICATION STATION CONTROL SECTION
361
VIDEO SIGNAL SUPERPOSING SECTION
371
LOCAL STATION INFORMATION STORAGE SECTION
372
REMOTE STATION INFORMATION STORAGE SECTION
36
37
364
CONTROL SIGNAL CONVERSION SECTION
363
CONTROL SIGNAL RECEIVING SECTION
VIDEO SIGNAL
11
111
VIDEO SIGNAL INPUT SECTION
112
DISPLAY DEVICE CONTROL SECTION
113
DISPLAY SECTION
DISPLAY DEVICE
12
INFRARED RAY SIGNAL
1201
CONTROL SIGNAL OUTPUT SECTION
1203
CONTROLLER CONTROL SECTION
1202
USER INPUT SECTION
CONTROLLER
13
1301
CONTROL SIGNAL OUTPUT SECTION
1304
CONTROLLER CONTROL SECTION
1303
USER INPUT SECTION
1302
CONNECTION INFORMATION STORAGE SECTION
COMMUNICATION STATION CONTROLLER

FIG. 29

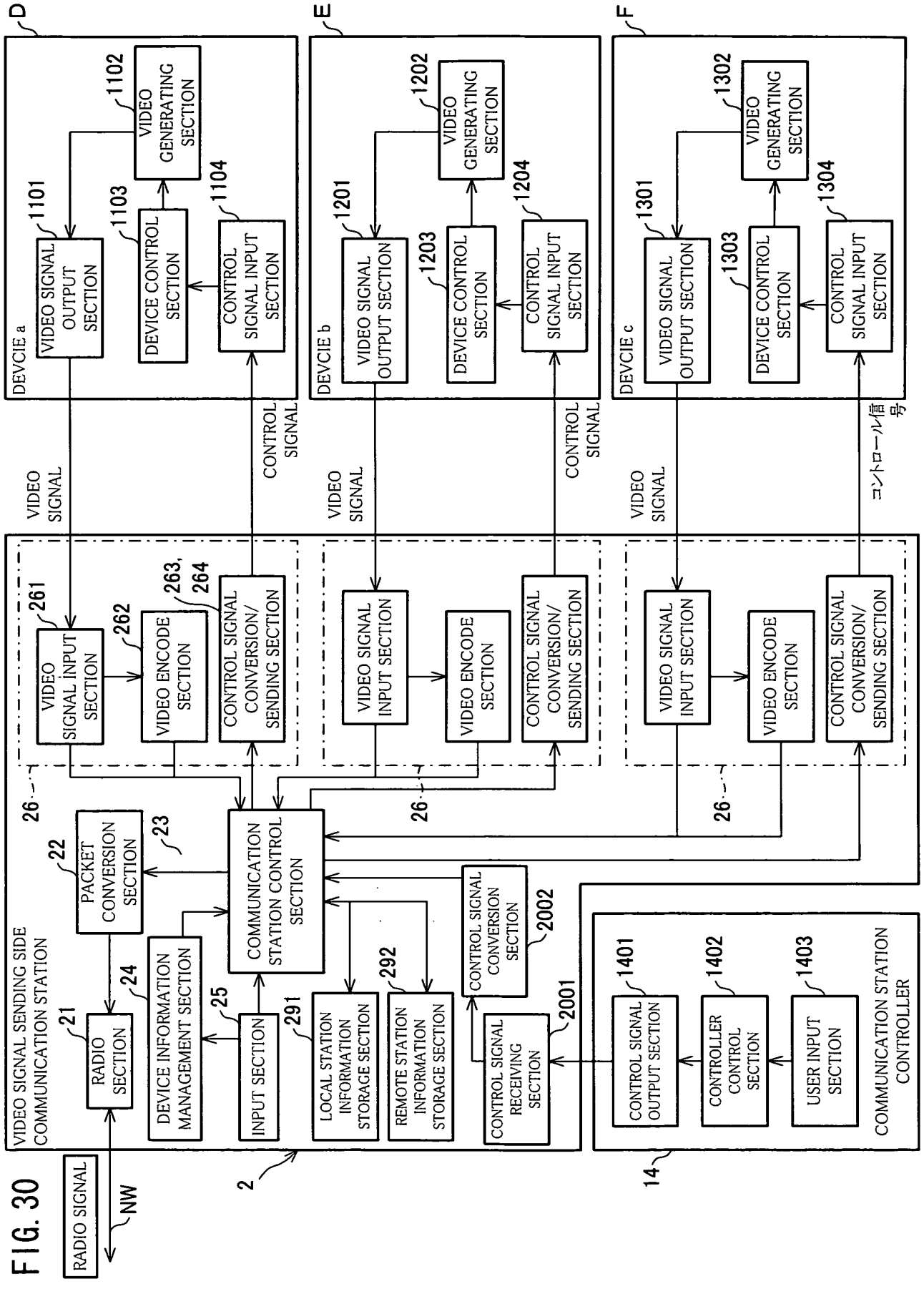

D
E
F
DEVCIE a
DEVCIE b
DEVCIE c
VIDEO SIGNAL OUTPUT SECTION
VIDEO GENERATING SECTION
DEVICE CONTROL SECTION
CONTROL SIGNAL INPUT SECTION
1101
1102
1103
1104
1201
1202
1203
1204
1301
1302
1303
1304
VIDEO SIGNAL
CONTROL SIGNAL
ユントロール信号
VIDEO SIGNAL INPUT SECTION
VIDEO ENCODE SECTION
CONTROL SIGNAL CONVERSION/ SENDING SECTION
261
262
263, 264
26
VIDEO SIGNAL SENDING SIDE COMMUNICATION STATION
PACKET CONVERSION SECTION
COMMUNICATION STATION CONTROL SECTION
CONTROL SIGNAL CONVERSION SECTION
22
23
2002
RADIO SECTION
DEVICE INFORMATION MANAGEMENT SECTION
INPUT SECTION
LOCAL STATION INFORMATION STORAGE SECTION
REMOTE STATION INFORMATION STORAGE SECTION
CONTROL SIGNAL RECEIVING SECTION
21
24
25
291
292
2001
2
RADIO SIGNAL
NW
CONTROL SIGNAL OUTPUT SECTION
CONTROLLER CONTROL SECTION
USER INPUT SECTION
COMMUNICATION STATION CONTROLLER
1401
1402
1403
14

FIG. 30

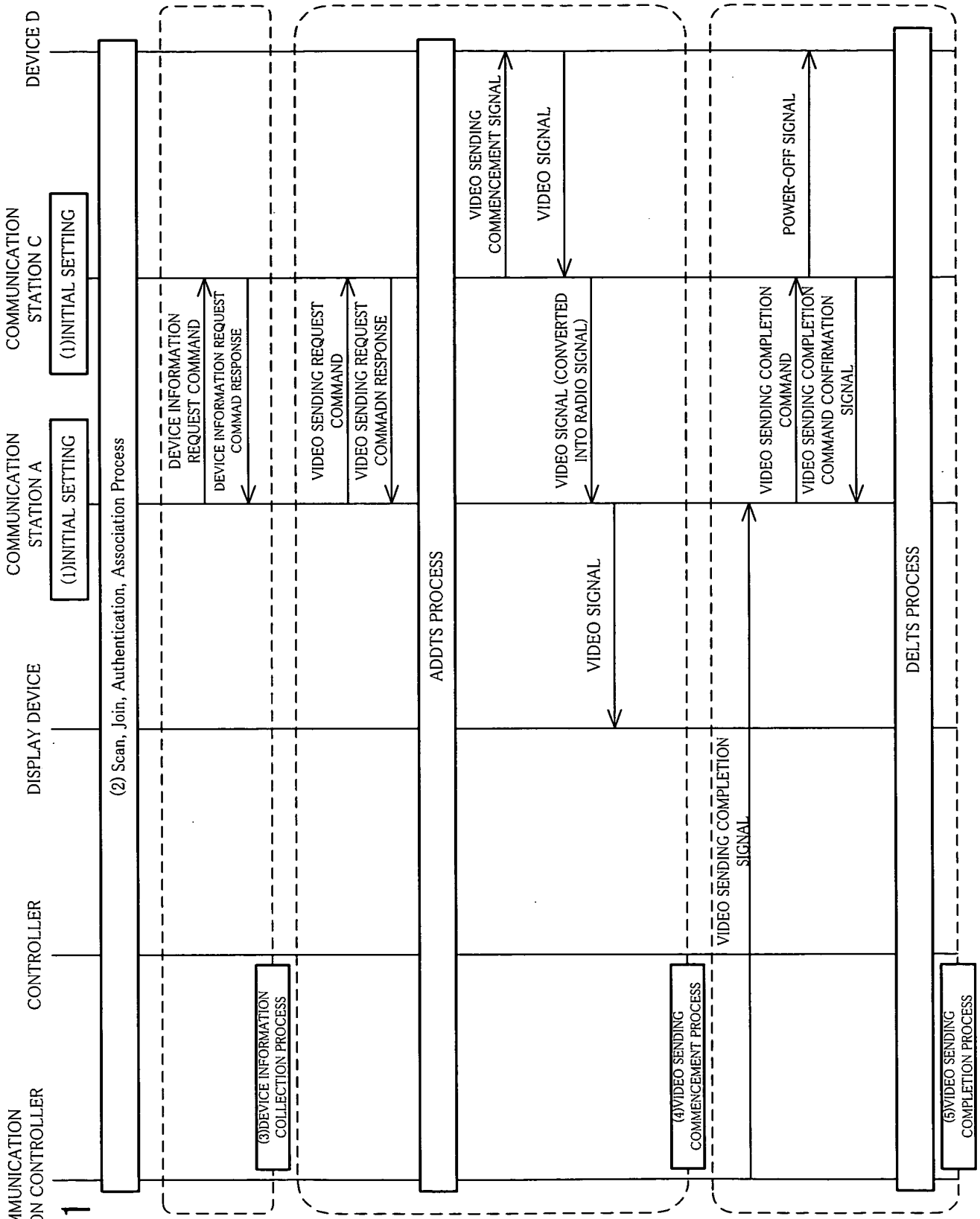

COMMUNICATION STATION CONTROLLER
CONTROLLER
DISPLAY DEVICE
COMMUNICATION STATION A
COMMUNICATION STATION C
DEVICE D
(1)INITIAL SETTING
(1)INITIAL SETTING
(2) Scan, Join, Authentication, Association Process
DEVICE INFORMATION REQUEST COMMAND
DEVICE INFORMATION REQUEST COMMAD RESPONSE
(3)DEVICE INFORMATION COLLECTION PROCESS
VIDEO SENDING REQUEST COMMAND
VIDEO SENDING REQUEST COMMADN RESPONSE
ADDTS PROCESS
VIDEO SENDING COMMENCEMENT SIGNAL
VIDEO SIGNAL
VIDEO SIGNAL (CONVERTED INTO RADIO SIGNAL)
VIDEO SIGNAL
(4)VIDEO SENDING COMMENCEMENT PROCESS
VIDEO SENDING COMPLETION SIGNAL
POWER-OFF SIGNAL
VIDEO SENDING COMPLETION COMMAND
VIDEO SENDING COMPLETION COMMAND CONFIRMATION SIGNAL
DELTS PROCESS
(5)VIDEO SENDING COMPLETION PROCESS

FIG. 31

FIG. 32

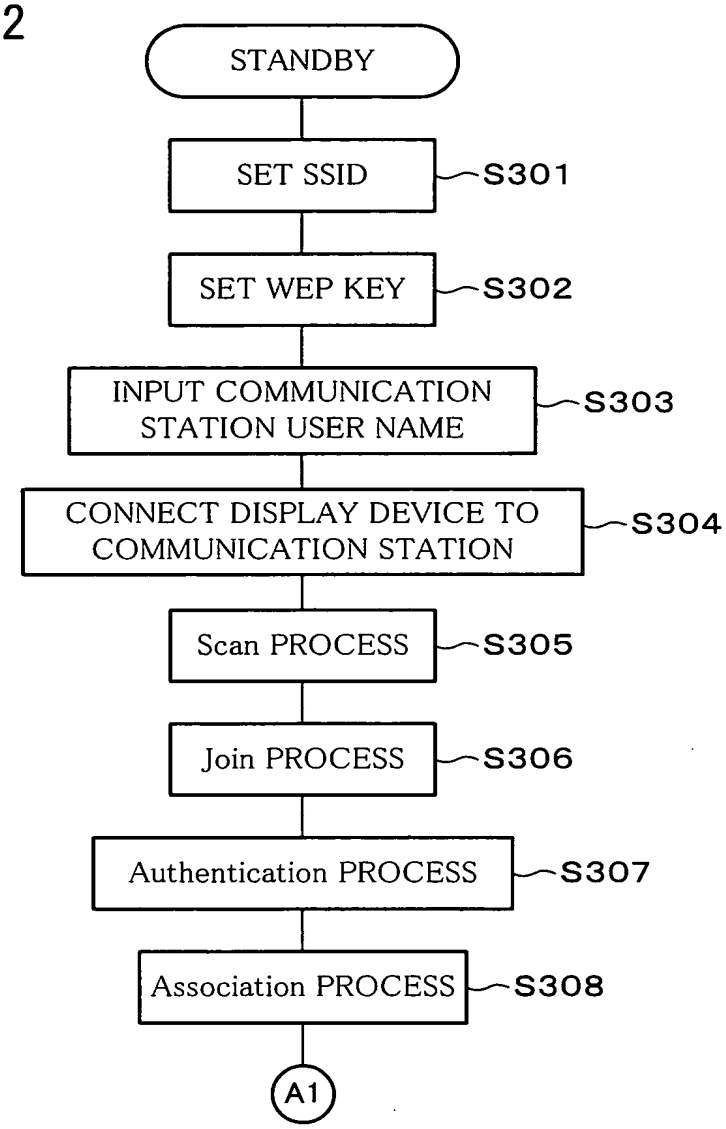

STANDBY
SET SSID
S301
SET WEP KEY
S302
INPUT COMMUNICATION STATION USER NAME
S303
CONNECT DISPLAY DEVICE TO COMMUNICATION STATION
S304
Scan PROCESS
S305
Join PROCESS
S306
Authentication PROCESS
S307
Association PROCESS
S308
A1

FIG. 33

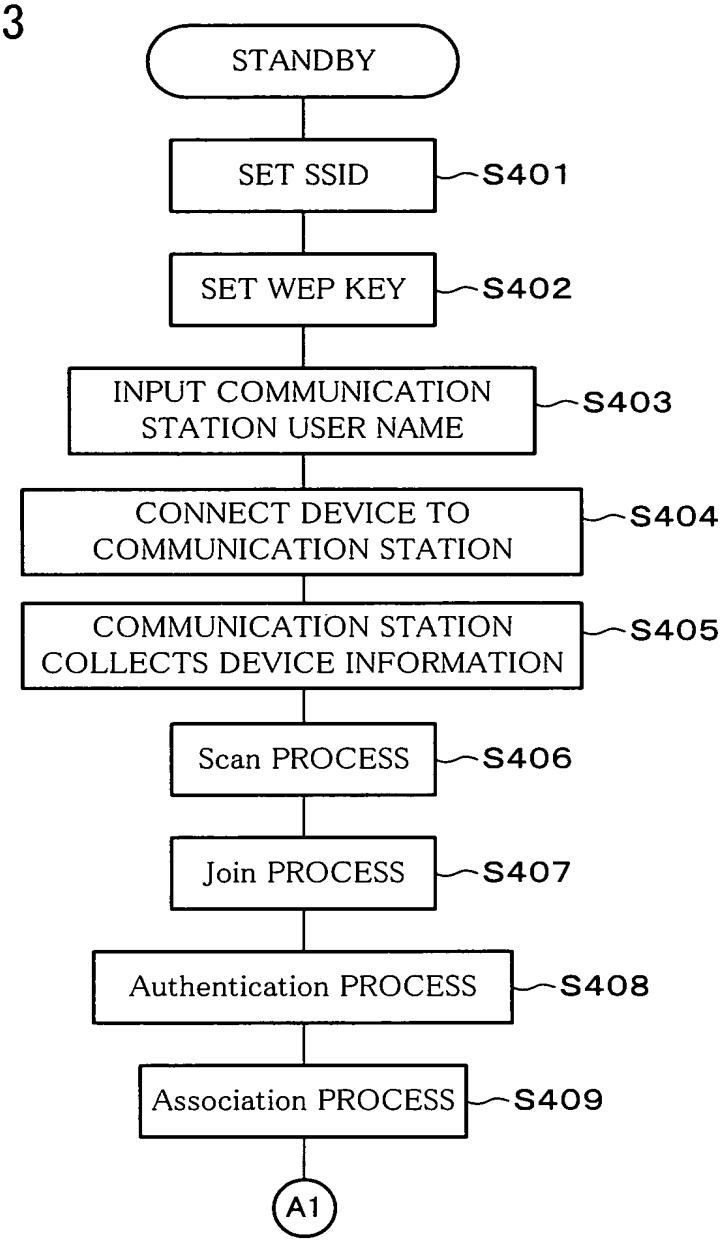

STANDBY
SET SSID
S401
SET WEP KEY
S402
INPUT COMMUNICATION STATION USER NAME
S403
CONNECT DEVICE TO COMMUNICATION STATION
S404
COMMUNICATION STATION COLLECTS DEVICE INFORMATION
S405
Scan PROCESS
S406
Join PROCESS
S407
Authentication PROCESS
S408
Association PROCESS
S409
A1

FIG. 34

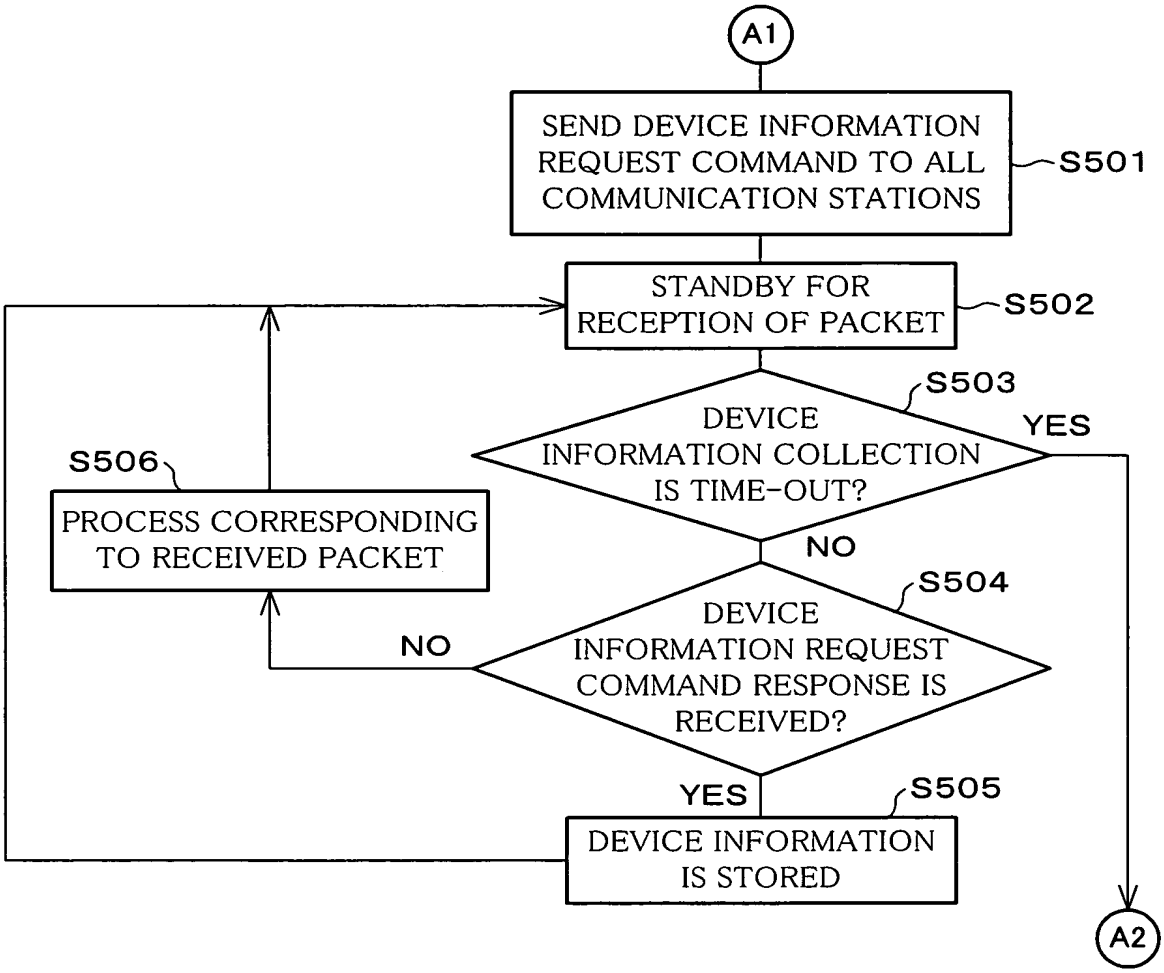

A1
SEND DEVICE INFORMATION REQUEST COMMAND TO ALL COMMUNICATION STATIONS
S501
STANDBY FOR RECEPTION OF PACKET
S502
S503
DEVICE INFORMATION COLLECTION IS TIME-OUT?
YES
NO
S504
DEVICE INFORMATION REQUEST COMMAND RESPONSE IS RECEIVED?
NO
YES
S505
DEVICE INFORMATION IS STORED
S506
PROCESS CORRESPONDING TO RECEIVED PACKET
A2

FIG. 35

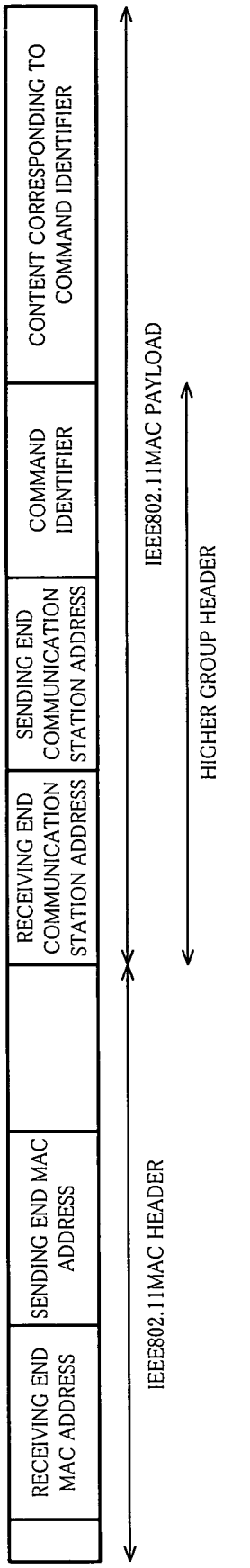
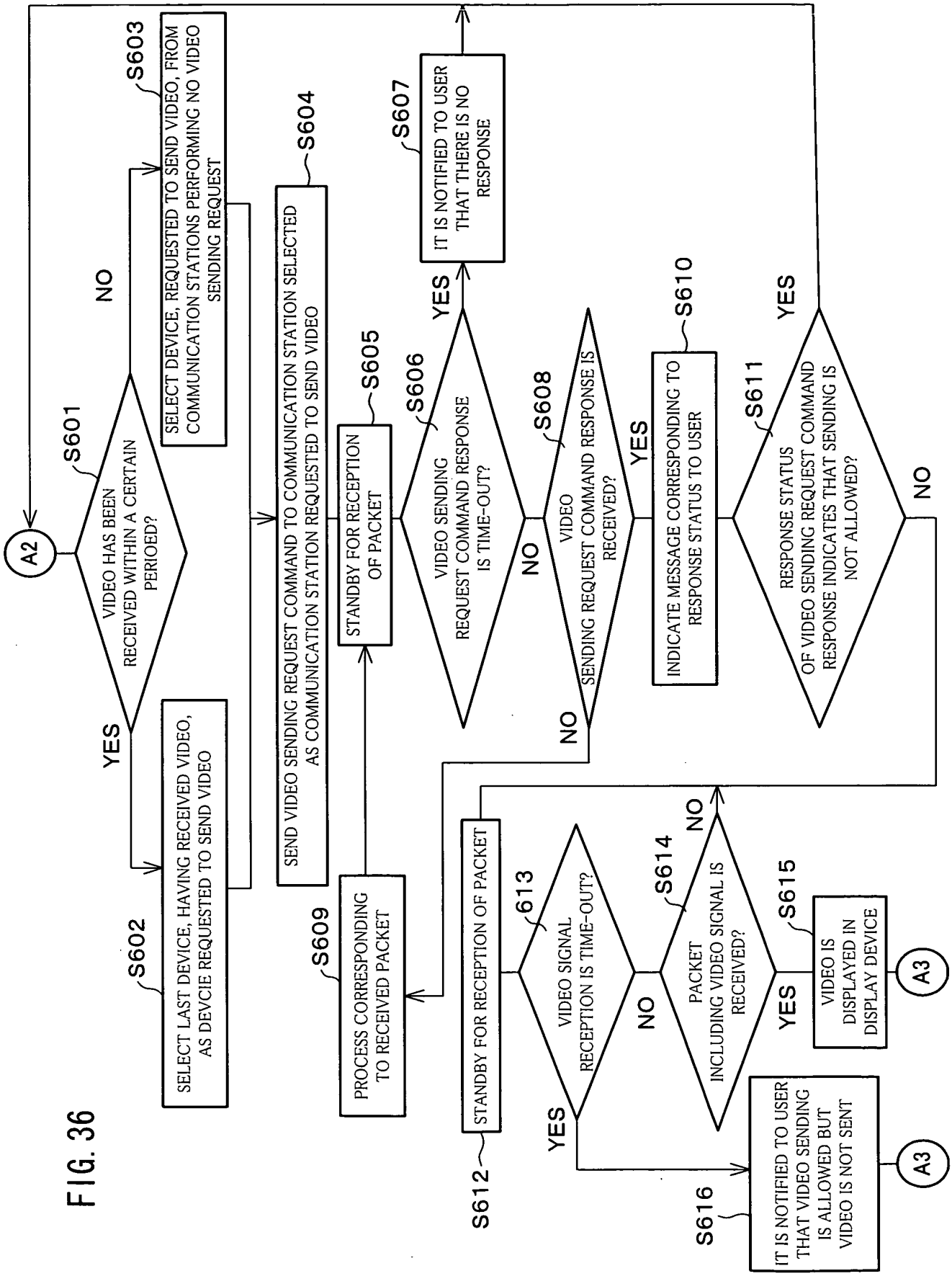

RECEIVING END MAC ADDRESS
SENDING END MAC ADDRESS
RECEIVING END COMMUNICATION STATION ADDRESS
SENDING END COMMUNICATION STATION ADDRESS
COMMAND IDENTIFIER
CONTENT CORRESPONDING TO COMMAND IDENTIFIER
IEEE802.11MAC HEADER
IEEE802.11MAC PAYLOAD
HIGHER GROUP HEADER

FIG. 36


A2
S601
VIDEO HAS BEEN RECEIVED WITHIN A CERTAIN PERIOED?
NO
S603
SELECT DEVICE, REQUESTED TO SEND VIDEO, FROM COMMUNICATION STATIONS PERFORMING NO VIDEO SENDING REQUEST
YES
S602
SELECT LAST DEVICE, HAVING RECEIVED VIDEO, AS DEVCIE REQUESTED TO SEND VIDEO
S604
SEND VIDEO SENDING REQUEST COMMAND TO COMMUNICATION STATION SELECTED AS COMMUNICATION STATION REQUESTED TO SEND VIDEO
S605
STANDBY FOR RECEPTION OF PACKET
S606
VIDEO SENDING REQUEST COMMAND RESPONSE IS TIME-OUT?
YES
S607
IT IS NOTIFIED TO USER THAT THERE IS NO RESPONSE
NO
S608
VIDEO SENDING REQUEST COMMAND RESPONSE IS RECEIVED?
YES
S610
INDICATE MESSAGE CORRESPONDING TO RESPONSE STATUS TO USER
S611
RESPONSE STATUS OF VIDEO SENDING REQUEST COMMAND RESPONSE INDICATES THAT SENDING IS NOT ALLOWED?
YES
NO
S609
PROCESS CORRESPONDING TO RECEIVED PACKET
S612
STANDBY FOR RECEPTION OF PACKET
613
VIDEO SIGNAL RECEPTION IS TIME-OUT?
YES
S614
PACKET INCLUDING VIDEO SIGNAL IS RECEIVED?
NO
S615
VIDEO IS DISPLAYED IN DISPLAY DEVICE
A3
S616
IT IS NOTIFIED TO USER THAT VIDEO SENDING IS ALLOWED BUT VIDEO IS NOT SENT
A3

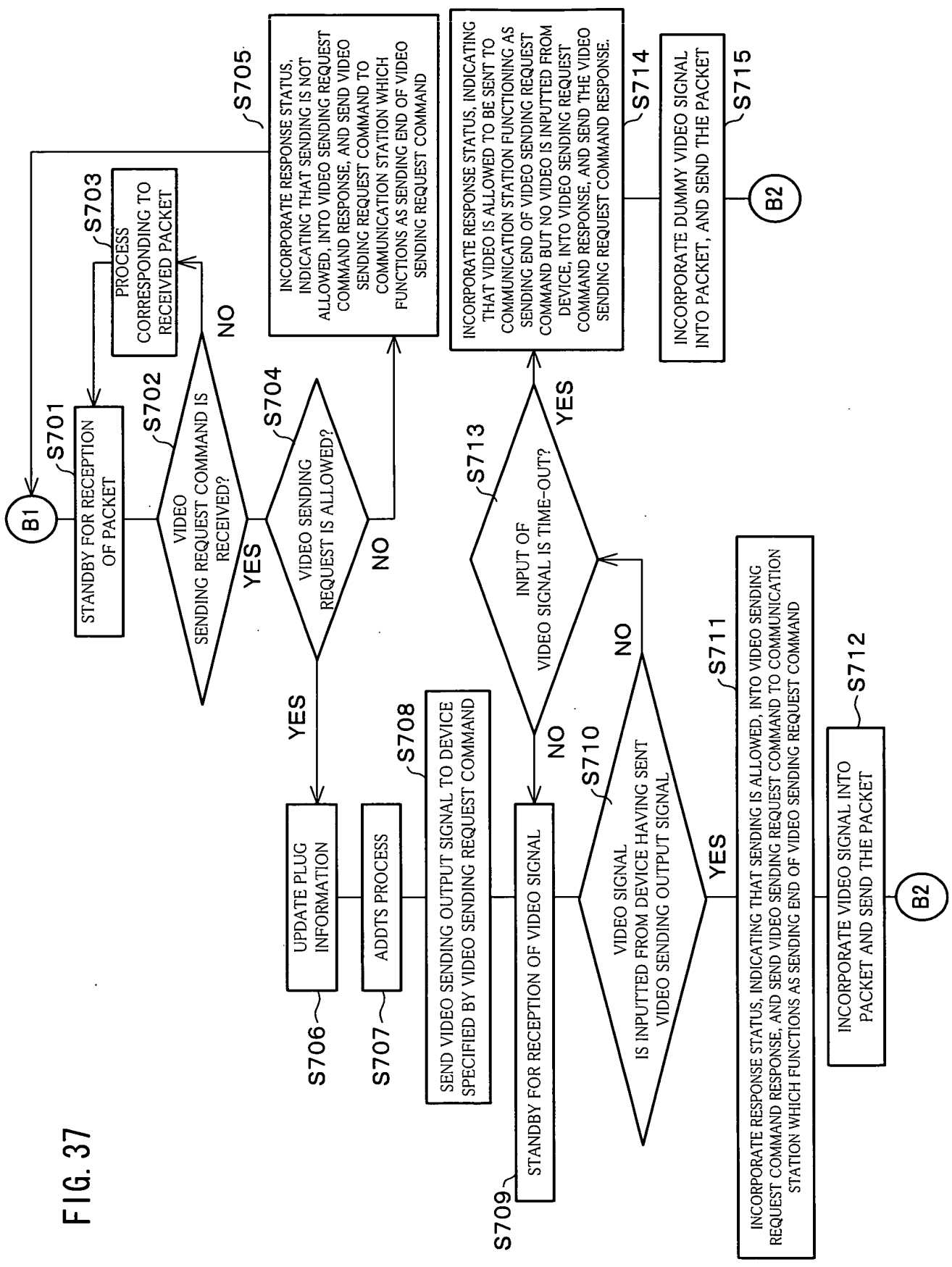

B1
S701
STANDBY FOR RECEPTION OF PACKET
S702
VIDEO SENDING REQUEST COMMAND IS RECEIVED?
NO
S703
PROCESS CORRESPONDING TO RECEIVED PACKET
YES
S704
VIDEO SENDING REQUEST IS ALLOWED?
NO
S705
INCORPORATE RESPONSE STATUS, INDICATING THAT SENDING IS NOT ALLOWED, INTO VIDEO SENDING REQUEST COMMAND RESPONSE, AND SEND VIDEO SENDING REQUEST COMMAND TO COMMUNICATION STATION WHICH FUNCTIONS AS SENDING END OF VIDEO SENDING REQUEST COMMAND
YES
S706
UPDATE PLUG INFORMATION
S707
ADDTS PROCESS
S708
SEND VIDEO SENDING OUTPUT SIGNAL TO DEVICE SPECIFIED BY VIDEO SENDING REQUEST COMMAND
S709
STANDBY FOR RECEPTION OF VIDEO SIGNAL
S710
VIDEO SIGNAL IS INPUTTED FROM DEVICE HAVING SENT VIDEO SENDING OUTPUT SIGNAL
NO
S711
INCORPORATE RESPONSE STATUS, INDICATING THAT SENDING IS ALLOWED, INTO VIDEO SENDING REQUEST COMMAND RESPONSE, AND SEND VIDEO SENDING REQUEST COMMAND TO COMMUNICATION STATION WHICH FUNCTIONS AS SENDING END OF VIDEO SENDING REQUEST COMMAND
YES
S712
INCORPORATE VIDEO SIGNAL INTO PACKET AND SEND THE PACKET
B2
S713
INPUT OF VIDEO SIGNAL IS TIME-OUT?
NO
YES
S714
INCORPORATE RESPONSE STATUS, INDICATING THAT VIDEO IS ALLOWED TO BE SENT TO COMMUNICATION STATION FUNCTIONING AS SENDING END OF VIDEO SENDING REQUEST COMMAND BUT NO VIDEO IS INPUTTED FROM DEVICE, INTO VIDEO SENDING REQUEST COMMAND RESPONSE, AND SEND THE VIDEO SENDING REQUEST COMMAND RESPONSE.
S715
INCORPORATE DUMMY VIDEO SIGNAL INTO PACKET, AND SEND THE PACKET
B2

FIG. 37

FIG. 38

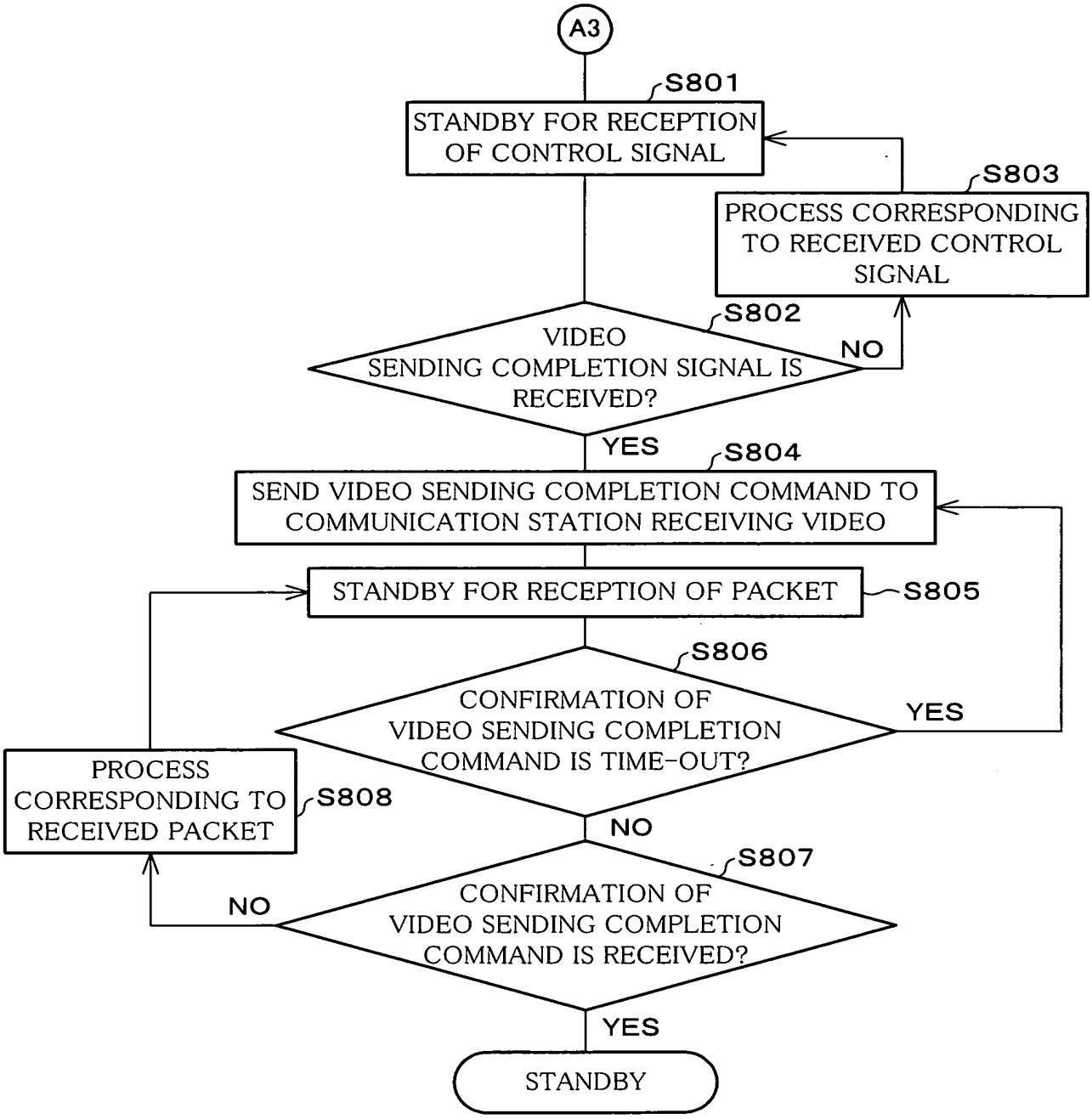
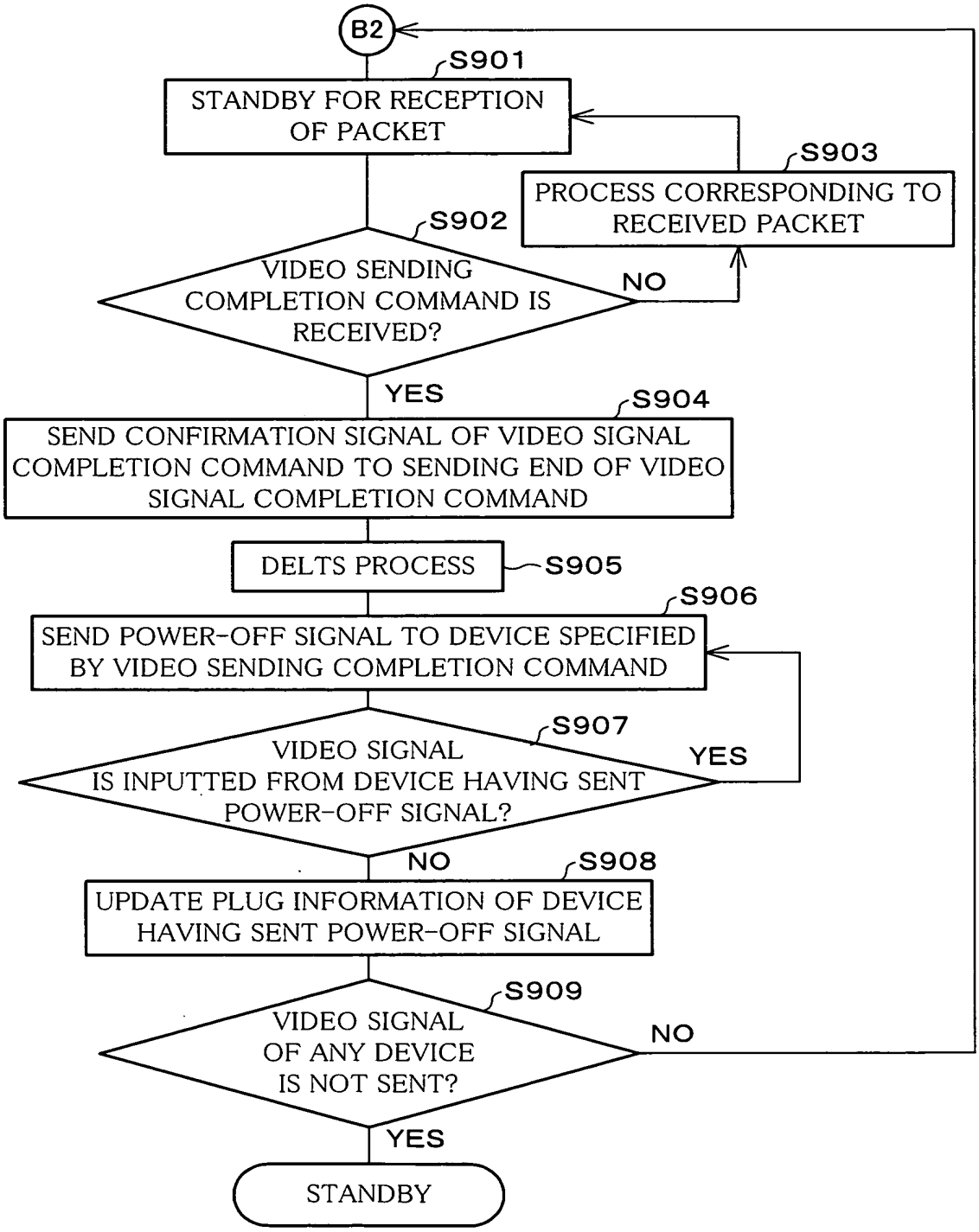

A3
S801
STANDBY FOR RECEPTION OF CONTROL SIGNAL
S803
PROCESS CORRESPONDING TO RECEIVED CONTROL SIGNAL
S802
VIDEO SENDING COMPLETION SIGNAL IS RECEIVED?
NO
YES
S804
SEND VIDEO SENDING COMPLETION COMMAND TO COMMUNICATION STATION RECEIVING VIDEO
STANDBY FOR RECEPTION OF PACKET
S805
S806
CONFIRMATION OF VIDEO SENDING COMPLETION COMMAND IS TIME-OUT?
YES
PROCESS CORRESPONDING TO RECEIVED PACKET
S808
NO
S807
CONFIRMATION OF VIDEO SENDING COMPLETION COMMAND IS RECEIVED?
NO
YES
STANDBY

FIG. 39


B2
S901
STANDBY FOR RECEPTION OF PACKET
S903
PROCESS CORRESPONDING TO RECEIVED PACKET
S902
VIDEO SENDING COMPLETION COMMAND IS RECEIVED?
NO
YES
S904
SEND CONFIRMATION SIGNAL OF VIDEO SIGNAL COMPLETION COMMAND TO SENDING END OF VIDEO SIGNAL COMPLETION COMMAND
DELTS PROCESS
S905
S906
SEND POWER-OFF SIGNAL TO DEVICE SPECIFIED BY VIDEO SENDING COMPLETION COMMAND
S907
VIDEO SIGNAL IS INPUTTED FROM DEVICE HAVING SENT POWER-OFF SIGNAL?
YES
NO
S908
UPDATE PLUG INFORMATION OF DEVICE HAVING SENT POWER-OFF SIGNAL
S909
VIDEO SIGNAL OF ANY DEVICE IS NOT SENT?
NO
YES
STANDBY

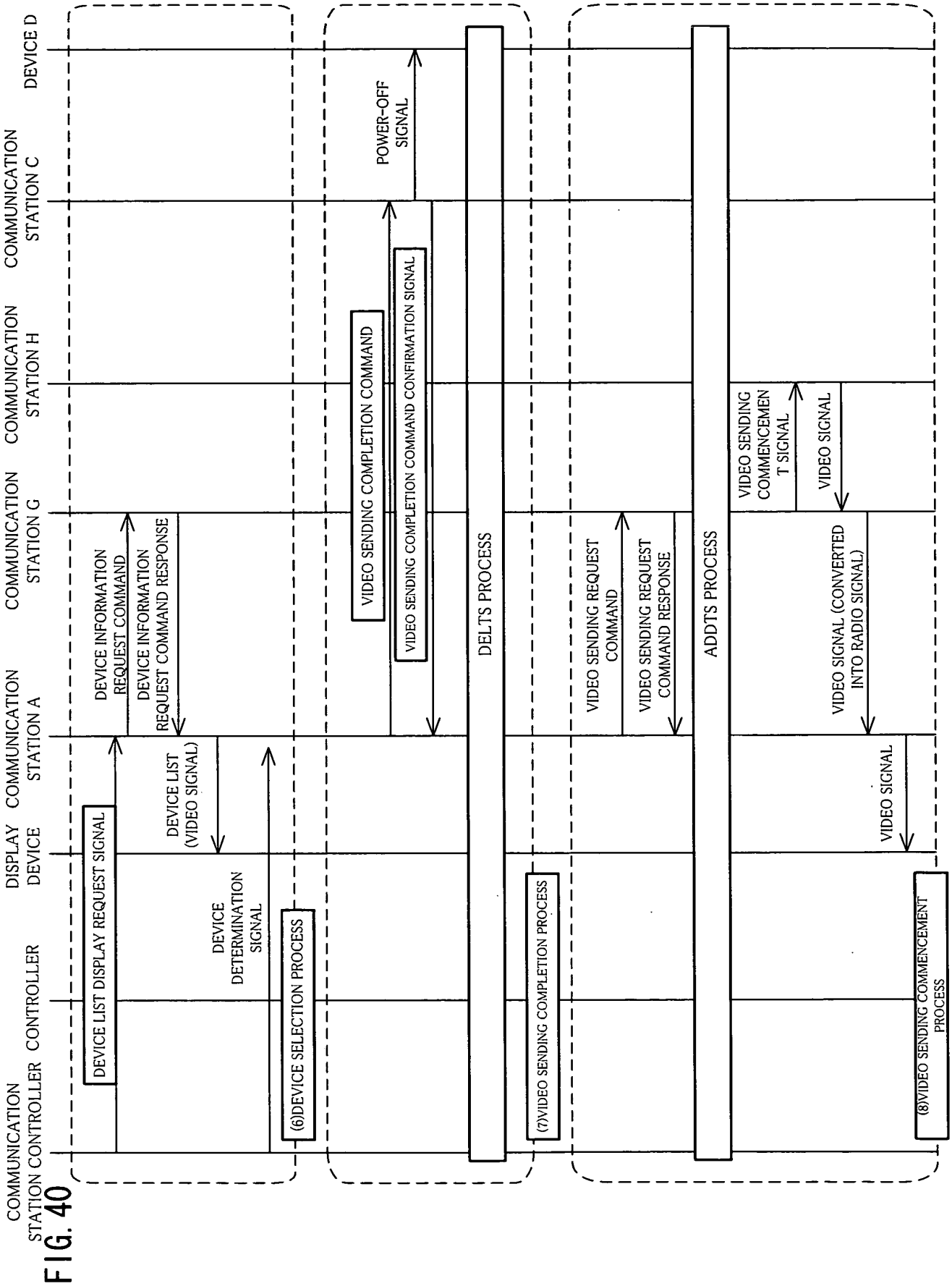

COMMUNICATION STATION CONTROLLER
CONTROLLER
DISPLAY DEVICE
COMMUNICATION STATION A
COMMUNICATION STATION G
COMMUNICATION STATION H
COMMUNICATION STATION C
DEVICE D
DEVICE LIST DISPLAY REQUEST SIGNAL
DEVICE INFORMATION REQUEST COMMAND
DEVICE INFORMATION REQUEST COMMAND RESPONSE
DEVICE LIST (VIDEO SIGNAL)
DEVICE DETERMINATION SIGNAL
(6)DEVICE SELECTION PROCESS
VIDEO SENDING COMPLETION COMMAND
VIDEO SENDING COMPLETION COMMAND CONFIRMATION SIGNAL
POWER-OFF SIGNAL
DELTS PROCESS
(7)VIDEO SENDING COMPLETION PROCESS
VIDEO SENDING REQUEST COMMAND
VIDEO SENDING REQUEST COMMAND RESPONSE
ADDTS PROCESS
VIDEO SENDING COMMENCEMENT SIGNAL
VIDEO SIGNAL
VIDEO SIGNAL (CONVERTED INTO RADIO SIGNAL)
VIDEO SIGNAL
(8)VIDEO SENDING COMMENCEMENT PROCESS

FIG. 40

FIG. 41

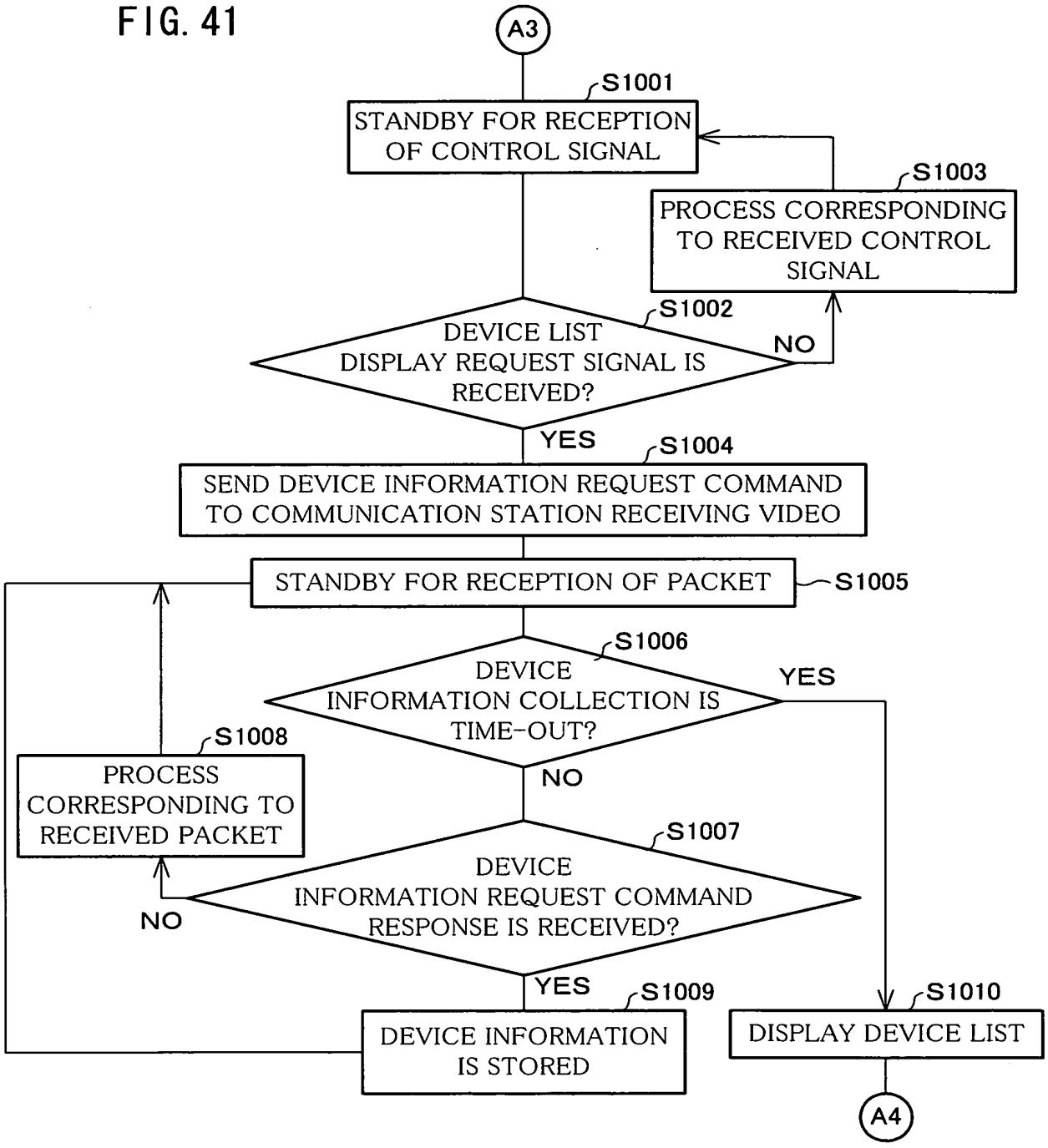

A3
S1001
STANDBY FOR RECEPTION OF CONTROL SIGNAL
S1003
PROCESS CORRESPONDING TO RECEIVED CONTROL SIGNAL
S1002
DEVICE LIST DISPLAY REQUEST SIGNAL IS RECEIVED?
NO
YES
S1004
SEND DEVICE INFORMATION REQUEST COMMAND TO COMMUNICATION STATION RECEIVING VIDEO
STANDBY FOR RECEPTION OF PACKET
S1005
S1006
DEVICE INFORMATION COLLECTION IS TIME-OUT?
YES
NO
S1008
PROCESS CORRESPONDING TO RECEIVED PACKET
S1007
DEVICE INFORMATION REQUEST COMMAND RESPONSE IS RECEIVED?
NO
YES
S1009
DEVICE INFORMATION IS STORED
S1010
DISPLAY DEVICE LIST
A4

FIG. 42

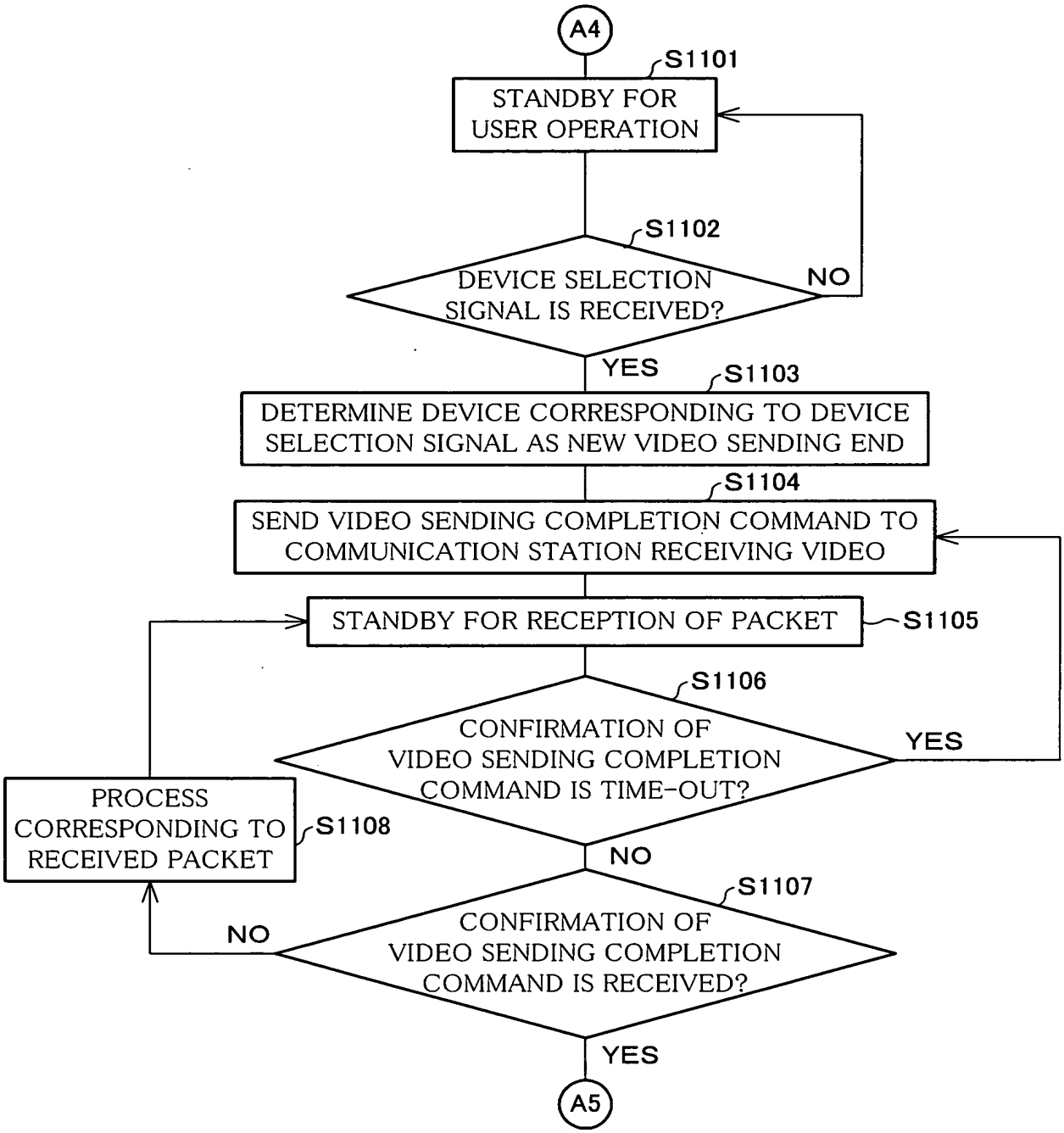

A4
S1101
STANDBY FOR USER OPERATION
S1102
DEVICE SELECTION SIGNAL IS RECEIVED?
NO
YES
S1103
DETERMINE DEVICE CORRESPONDING TO DEVICE SELECTION SIGNAL AS NEW VIDEO SENDING END
S1104
SEND VIDEO SENDING COMPLETION COMMAND TO COMMUNICATION STATION RECEIVING VIDEO
STANDBY FOR RECEPTION OF PACKET
S1105
S1106
CONFIRMATION OF VIDEO SENDING COMPLETION COMMAND IS TIME-OUT?
YES
NO
PROCESS CORRESPONDING TO RECEIVED PACKET
S1108
S1107
CONFIRMATION OF VIDEO SENDING COMPLETION COMMAND IS RECEIVED?
NO
YES
A5

FIG. 43

NUMBER	DEVICE NAME	DEVICE TYPE	COMMUNICATION STATION	CONDITION
1	VTR IN LIVING ROOM	VTR	COMMUNICATION STATION IN LIVING ROOM	UNUSED
2	DVD IN LIVING ROOM	DVD	COMMUNICATION STATION IN LIVING ROOM	IN USE
3	VTR IN CHILD'S ROOM	VTR	COMMUNICATION STATION IN CHILD'S ROOM	UNCLEAR
4	HARD DISC RECORDER IN STUDY ROOM	HARD DISC RECORDER	COMMUNICATION STATION IN STUDY ROOM	UNUSED

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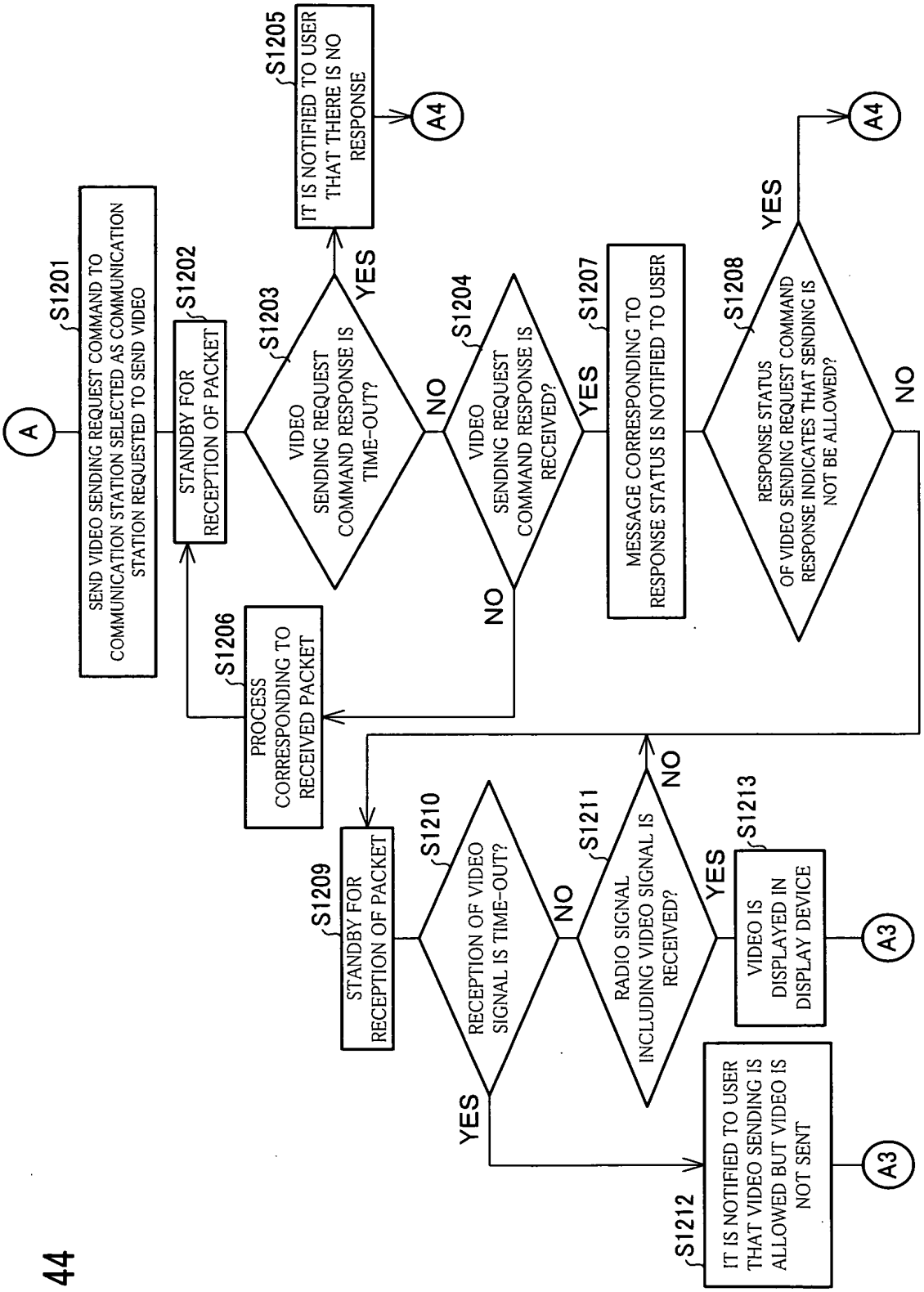
10/512057

FIG. 44


A
S1201
SEND VIDEO SENDING REQUEST COMMAND TO COMMUNICATION STATION SELECTED AS COMMUNICATION STATION REQUESTED TO SEND VIDEO
S1202
STANDBY FOR RECEPTION OF PACKET
S1203
VIDEO SENDING REQUEST COMMAND RESPONSE IS TIME-OUT?
YES
S1205
IT IS NOTIFIED TO USER THAT THERE IS NO RESPONSE
A4
NO
S1204
VIDEO SENDING REQUEST COMMAND RESPONSE IS RECEIVED?
YES
S1207
MESSAGE CORRESPONDING TO RESPONSE STATUS IS NOTIFIED TO USER
S1208
RESPONSE STATUS OF VIDEO SENDING REQUEST COMMAND RESPONSE INDICATES THAT SENDING IS NOT BE ALLOWED?
YES
A4
NO
NO
S1206
PROCESS CORRESPONDING TO RECEIVED PACKET
S1209
STANDBY FOR RECEPTION OF PACKET
S1210
RECEPTION OF VIDEO SIGNAL IS TIME-OUT?
YES
S1212
IT IS NOTIFIED TO USER THAT VIDEO SENDING IS ALLOWED BUT VIDEO IS NOT SENT
A3
NO
S1211
RADIO SIGNAL INCLUDING VIDEO SIGNAL IS RECEIVED?
NO
YES
S1213
VIDEO IS DISPLAYED IN DISPLAY DEVICE
A3

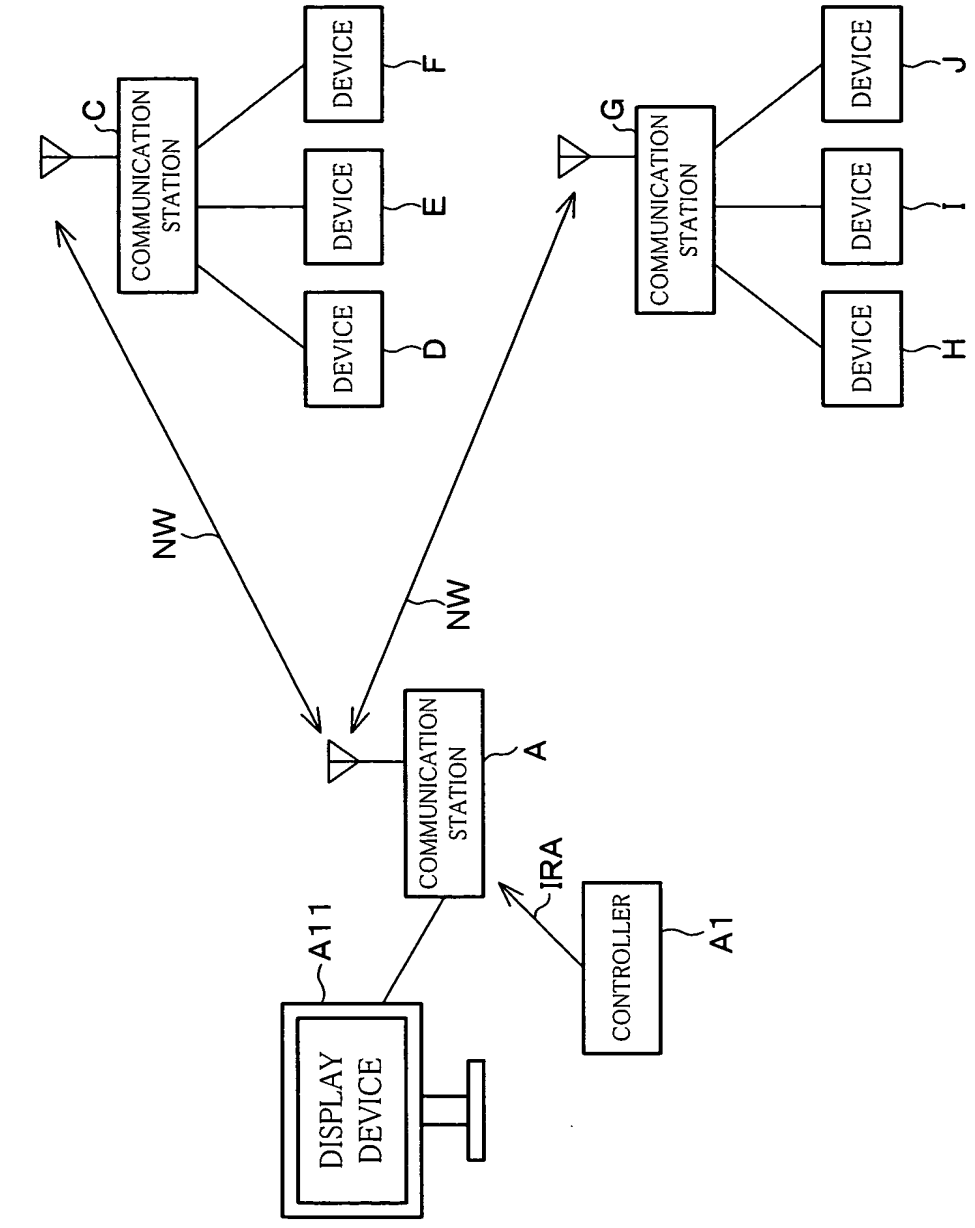

DISPLAY DEVICE
A11
CONTROLLER
A1
IRA
COMMUNICATION STATION
A
NW
NW
COMMUNICATION STATION
C
DEVICE
D
DEVICE
E
DEVICE
F
COMMUNICATION STATION
G
DEVICE
H
DEVICE
I
DEVICE
J

FIG. 45

FIG. 46

RECEIVING END ADDRESS	11111	
SENDING END ADDRESS	33333	
INFORMATION SECTION	COMMAND CONTENT	CONNECTION ESTABLISHMENT REQUEST
	SENDING END COMMUNICATION STATION ADDRESS	33333
	SENDING END DEVICE ID	123
	RECEIVING END COMMUNICATION STATION ADDRESS	11111
	RECEIVING END DEVICE ID	1111
	CONTROLLER ID	444

FIG. 47

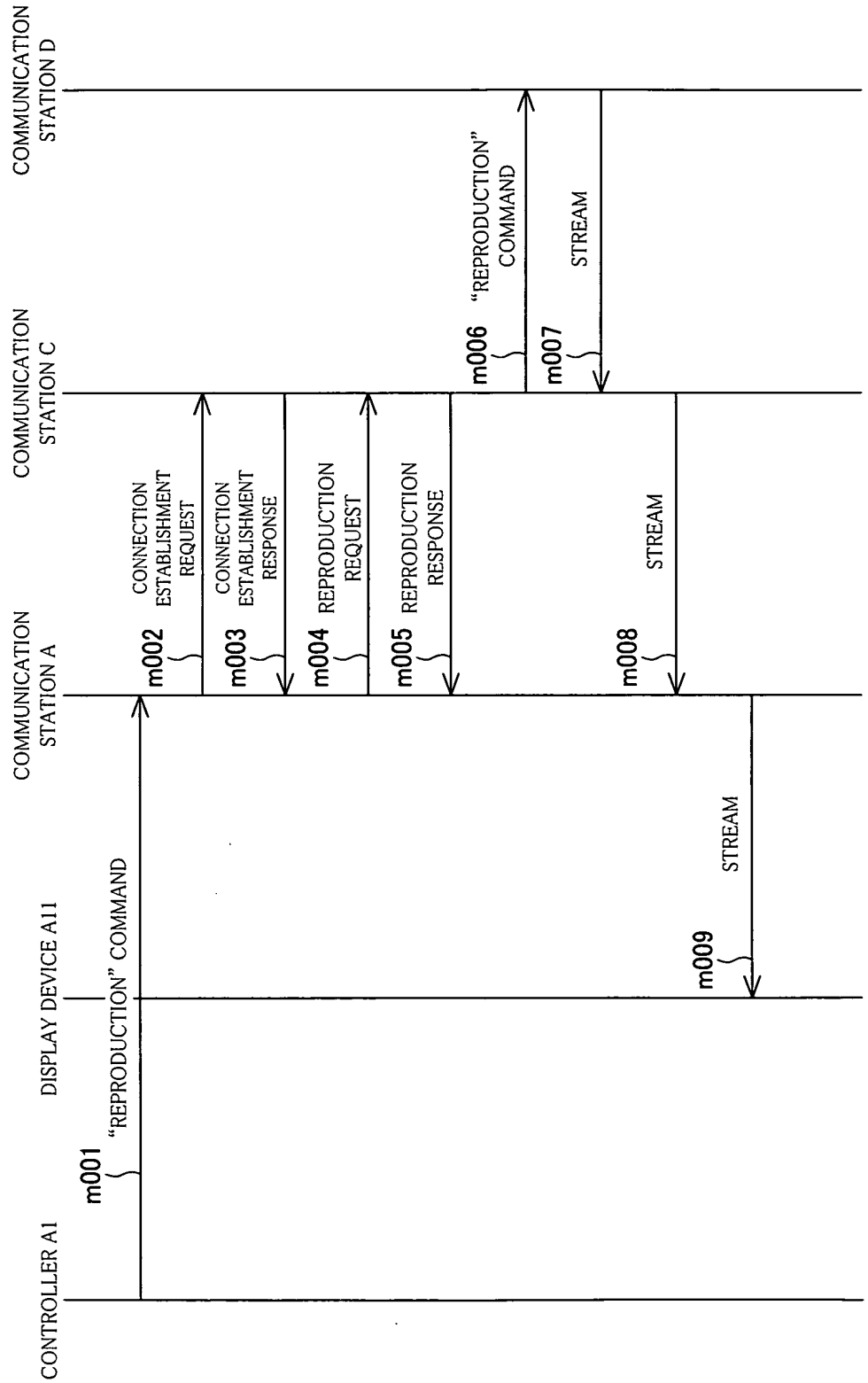

CONTROLLER A1
DISPLAY DEVICE A11
COMMUNICATION STATION A
COMMUNICATION STATION C
COMMUNICATION STATION D
m001
"REPRODUCTION" COMMAND
m002
CONNECTION ESTABLISHMENT REQUEST
m003
CONNECTION ESTABLISHMENT RESPONSE
m004
REPRODUCTION REQUEST
m005
REPRODUCTION RESPONSE
m006
"REPRODUCTION" COMMAND
m007
STREAM
m008
STREAM
m009
STREAM

FIG. 48

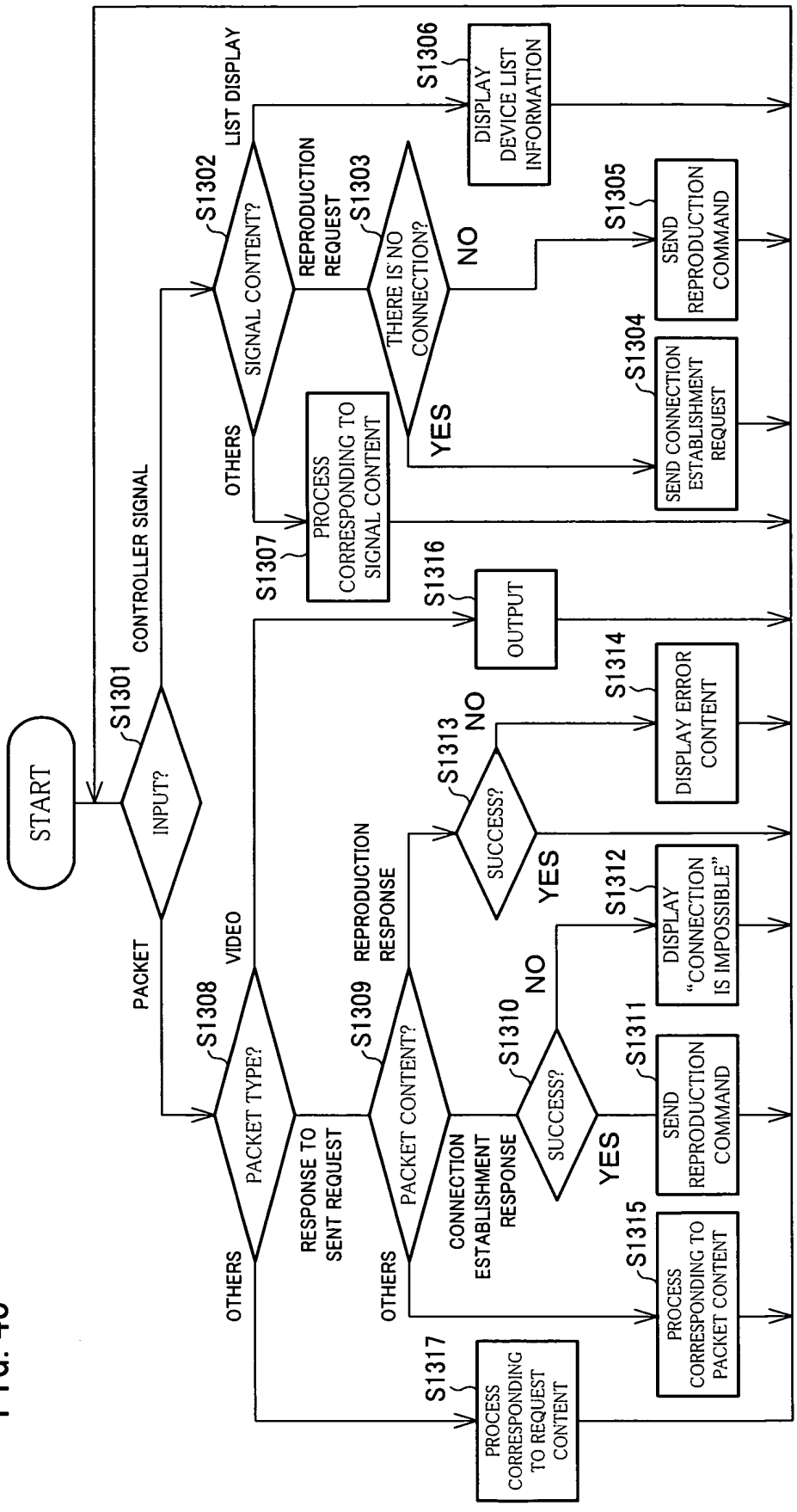

START
S1301
INPUT?
CONTROLLER SIGNAL
PACKET
S1308
PACKET TYPE?
VIDEO
OTHERS
RESPONSE TO SENT REQUEST
S1309
PACKET CONTENT?
REPRODUCTION RESPONSE
OTHERS
CONNECTION ESTABLISHMENT RESPONSE
S1310
SUCCESS?
NO
YES
S1311
SEND REPRODUCTION COMMAND
S1312
DISPLAY "CONNECTION IS IMPOSSIBLE"
S1313
SUCCESS?
NO
YES
S1314
DISPLAY ERROR CONTENT
S1315
PROCESS CORRESPONDING TO PACKET CONTENT
S1316
OUTPUT
S1317
PROCESS CORRESPONDING TO REQUEST CONTENT
S1302
SIGNAL CONTENT?
LIST DISPLAY
REPRODUCTION REQUEST
OTHERS
S1303
THERE IS NO CONNECTION?
NO
YES
S1304
SEND CONNECTION ESTABLISHMENT REQUEST
S1305
SEND REPRODUCTION COMMAND
S1306
DISPLAY DEVICE LIST INFORMATION
S1307
PROCESS CORRESPONDING TO SIGNAL CONTENT

FIG. 49

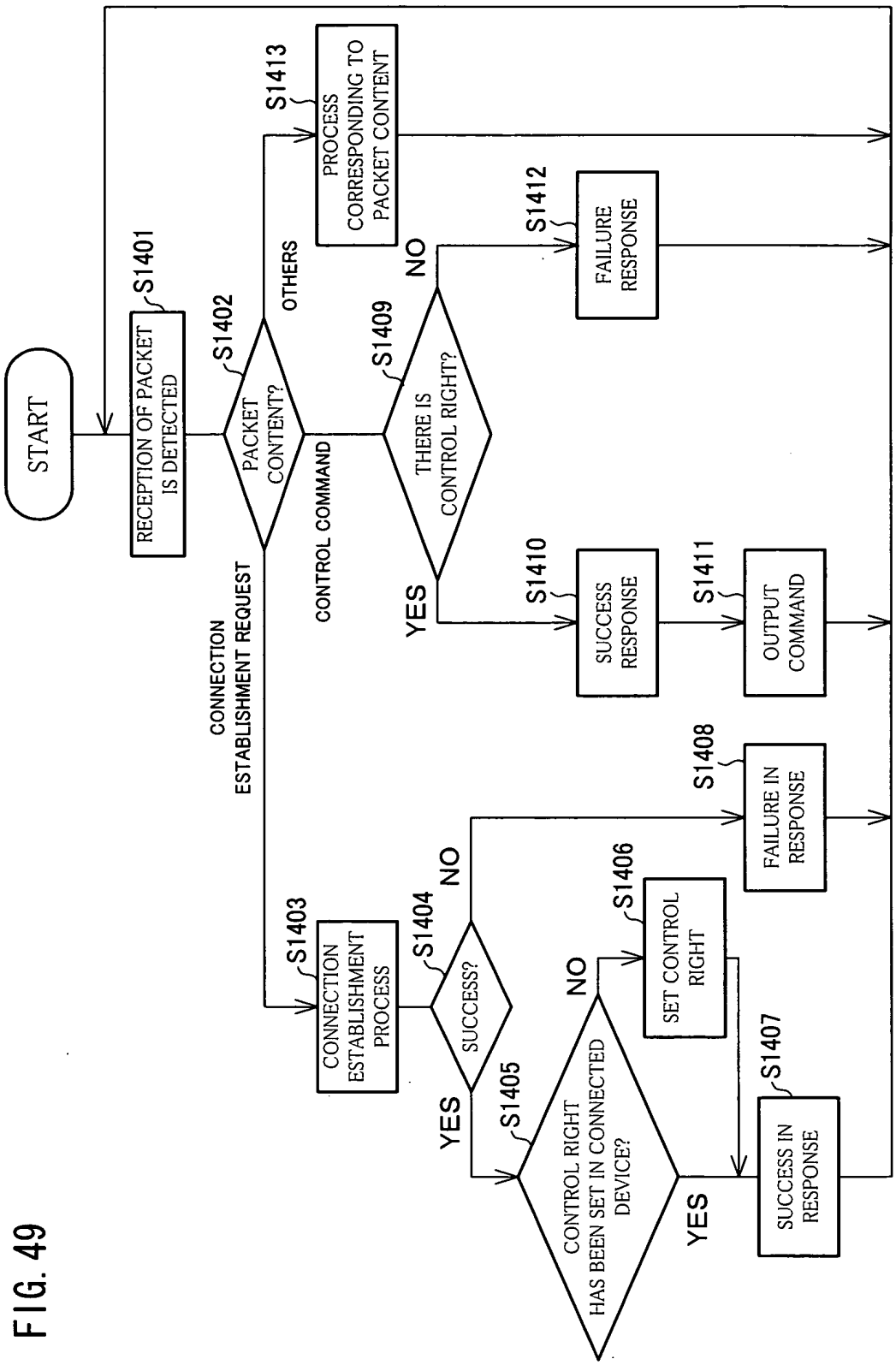

START
RECEPTION OF PACKET IS DETECTED
S1401
PACKET CONTENT?
S1402
OTHERS
S1413
PROCESS CORRESPONDING TO PACKET CONTENT
CONTROL COMMAND
THERE IS CONTROL RIGHT?
S1409
NO
S1412
FAILURE RESPONSE
YES
S1410
SUCCESS RESPONSE
S1411
OUTPUT COMMAND
CONNECTION ESTABLISHMENT REQUEST
S1403
CONNECTION ESTABLISHMENT PROCESS
S1404
SUCCESS?
NO
S1408
FAILURE IN RESPONSE
YES
S1405
CONTROL RIGHT HAS BEEN SET IN CONNECTED DEVICE?
NO
S1406
SET CONTROL RIGHT
YES
S1407
SUCCESS IN RESPONSE

FIG. 50

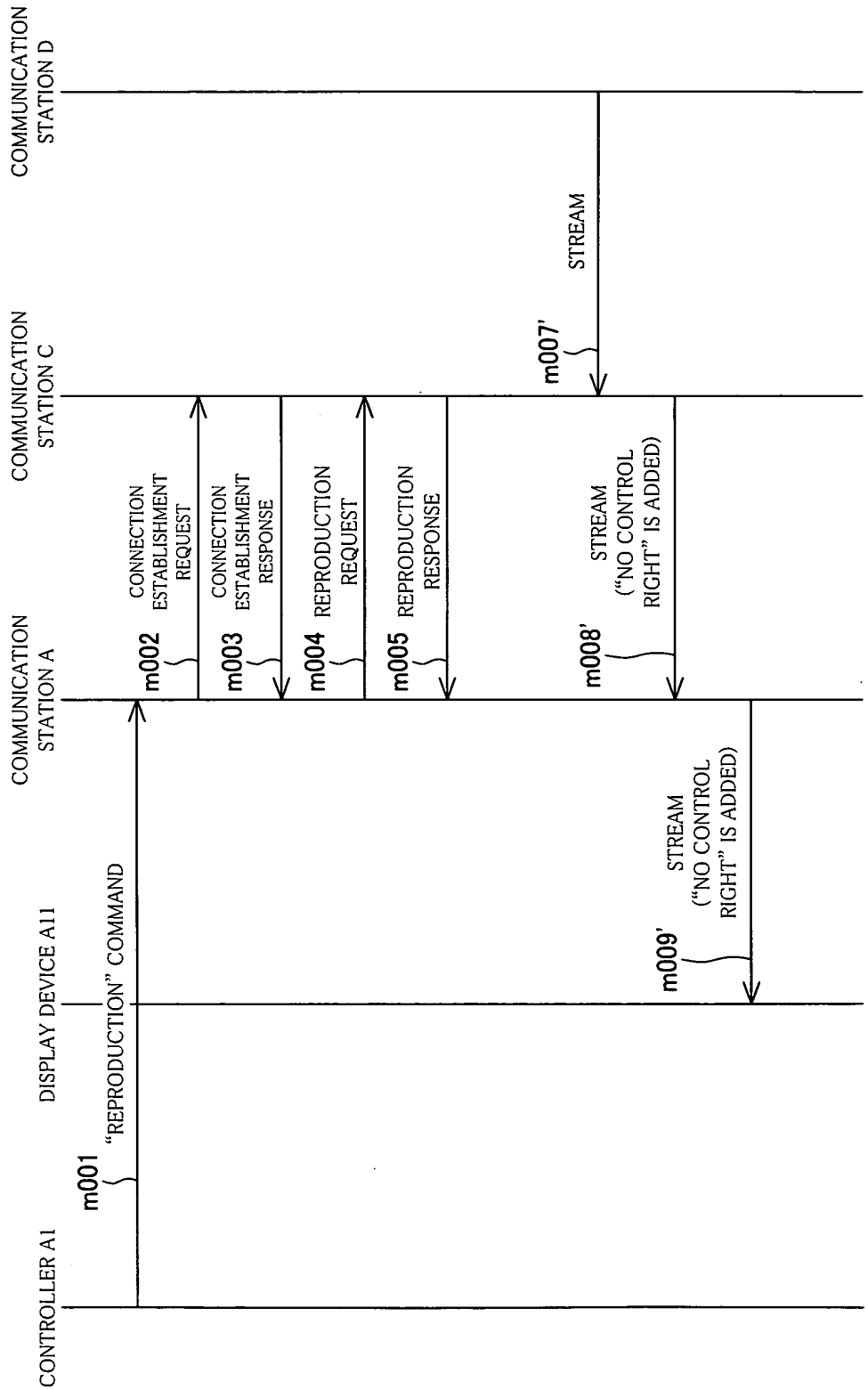
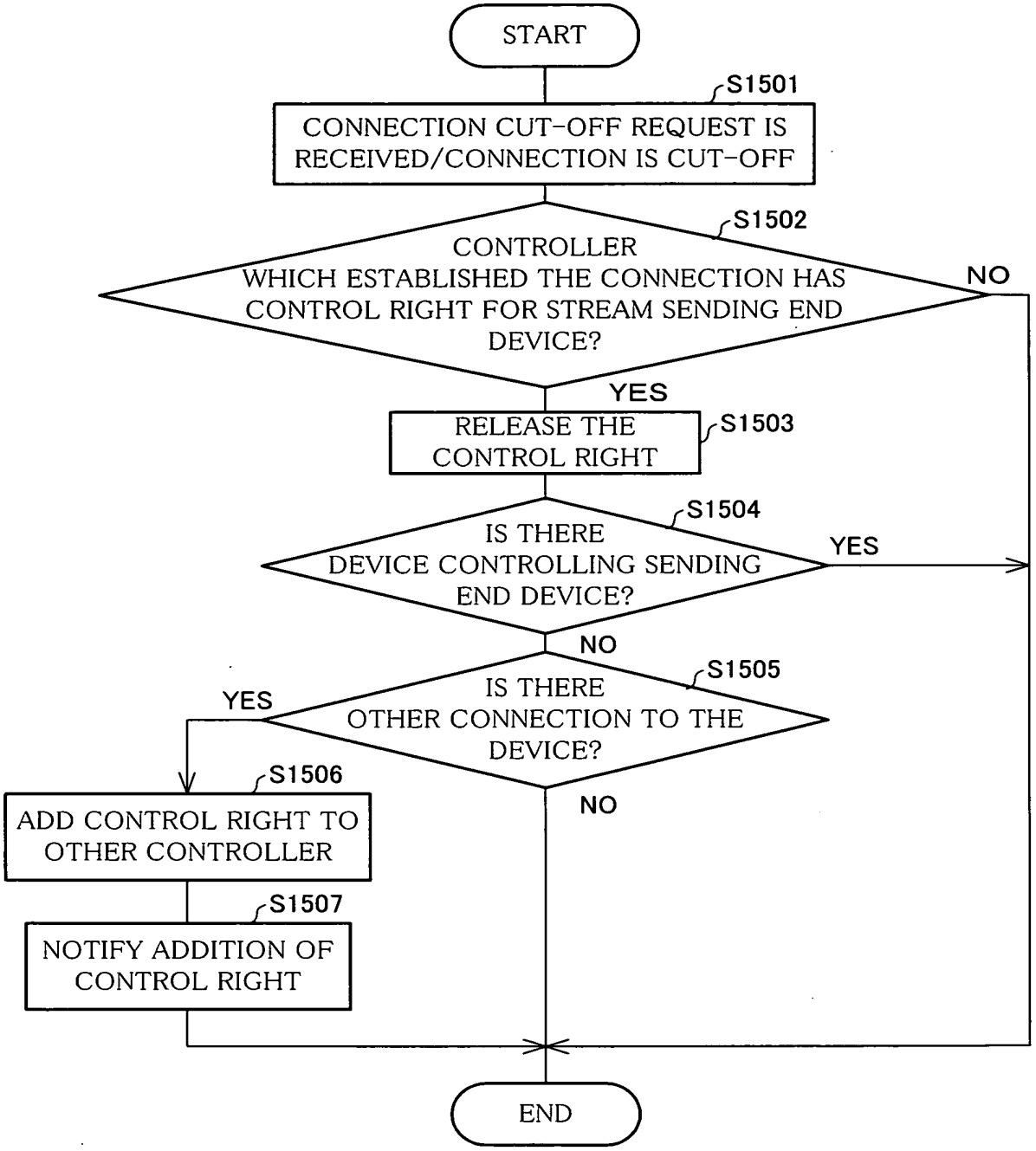

CONTROLLER A1
DISPLAY DEVICE A11
COMMUNICATION STATION A
COMMUNICATION STATION C
COMMUNICATION STATION D
m001
"REPRODUCTION" COMMAND
m002
CONNECTION ESTABLISHMENT REQUEST
m003
CONNECTION ESTABLISHMENT RESPONSE
m004
REPRODUCTION REQUEST
m005
REPRODUCTION RESPONSE
m007'
STREAM
m008'
STREAM ("NO CONTROL RIGHT" IS ADDED)
m009'
STREAM ("NO CONTROL RIGHT" IS ADDED)

FIG. 51


START
S1501
CONNECTION CUT-OFF REQUEST IS RECEIVED/CONNECTION IS CUT-OFF
S1502
CONTROLLER WHICH ESTABLISHED THE CONNECTION HAS CONTROL RIGHT FOR STREAM SENDING END DEVICE?
NO
YES
RELEASE THE CONTROL RIGHT
S1503
S1504
IS THERE DEVICE CONTROLLING SENDING END DEVICE?
YES
NO
S1505
IS THERE OTHER CONNECTION TO THE DEVICE?
YES
NO
S1506
ADD CONTROL RIGHT TO OTHER CONTROLLER
S1507
NOTIFY ADDITION OF CONTROL RIGHT
END